

JOURNAL

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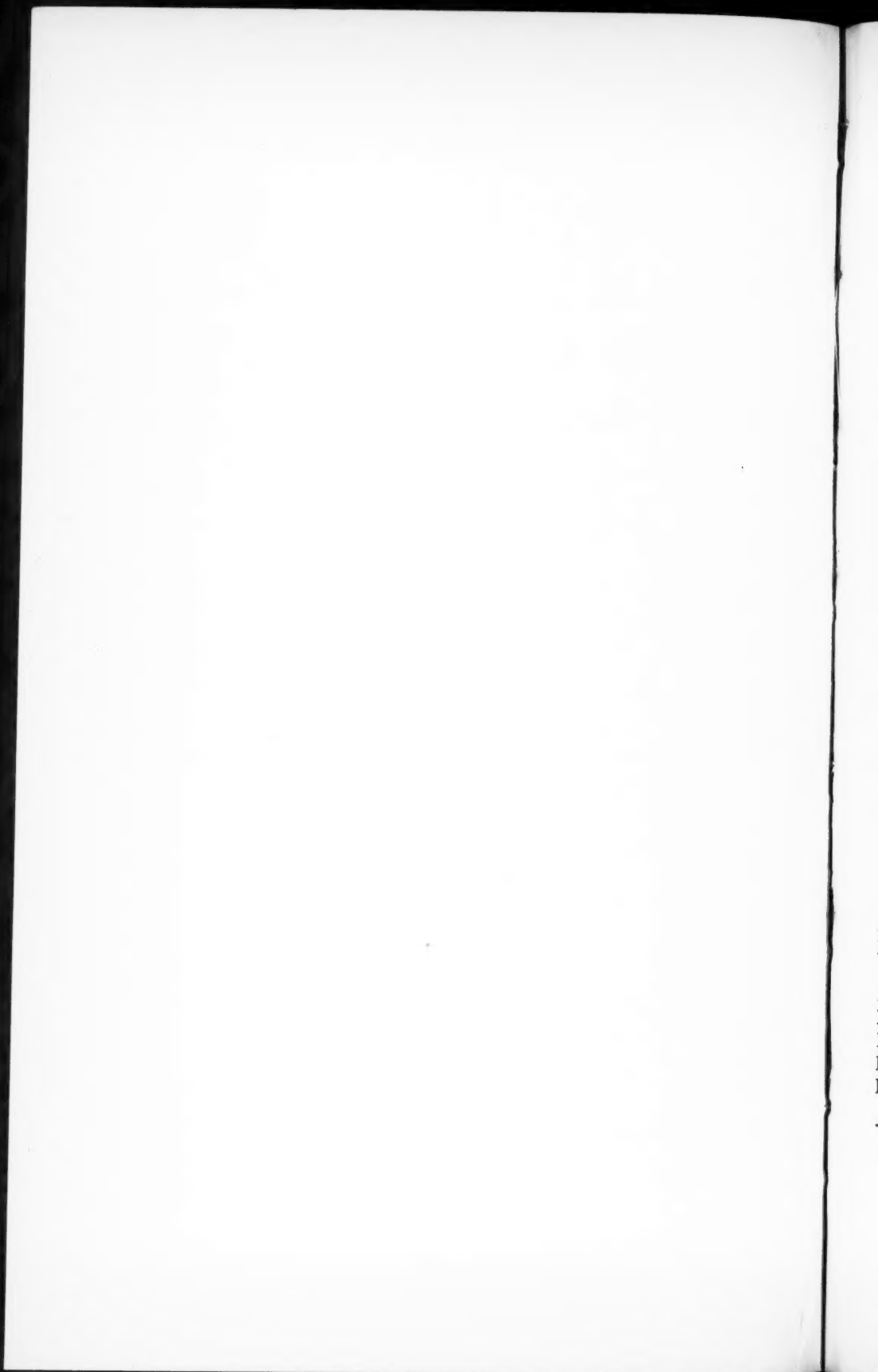
AMERICAN ASSOCIATION
of COLLEGIATE REGISTRARS



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· CONTENTS ·

UNESCO: INTERNATIONAL EXPERIMENT IN EDUCATION	
..... <i>John H. Esterline</i>	261
THE MEASUREMENT OF ACADEMIC ADJUSTMENT <i>Henry Borow</i>	274
THE USE OF THE USAFI GENERAL EDUCATIONAL DEVELOPMENT TESTS	
..... <i>Paul L. Dressel</i>	287
GRADE RECORDS AND TABULATING MACHINES	
..... <i>Max Fichtenbaum and W. B. Shipp</i>	293
MEDICAL EDUCATION PAST AND PRESENT	
..... <i>George Moon</i>	302
PROBLEMS OF PERSONNEL SERVICE AND THE VETERAN	
..... <i>J. Anthony Humphreys</i>	311
CAPITALIZATION DISABILITIES OF COLLEGE FRESHMEN	
..... <i>Walter Scribner Guiler</i>	317
CHANGES IN SEMESTER HOUR AND SUBJECT MATTER REQUIRE- MENTS FOR THE BACHELOR'S DEGREE IN LIBERAL ARTS COL- LEGES, 1890-1940	
..... <i>Orvin T. Richardson</i>	328
THE FUTURE OF THE "VETERAN PROBLEM" IN AMERICAN COL- LEGES	
..... <i>David D. Henry</i>	334
CONCORD COLLEGE PLANS A FIELD SERVICE PROGRAM	
..... <i>Eston K. Feaster</i>	341
THE HIGH SCHOOL PRINCIPAL SPEAKS TO THE REGISTRAR	
..... <i>Leonard P. Stewart</i>	346
SALUTE TO THE PROFESSORS	
..... <i>Clyde W. Park</i>	350
EDITORIAL COMMENT	353
BOOK REVIEWS	358
IN THE JOURNALS	368
IN THE MAIL	374
REPORTED TO US	378
PRELIMINARY PROGRAM	389
DIRECTORY OF REGIONAL ASSOCIATIONS	394
EMPLOYMENT SERVICE	396

The JOURNAL is indexed in the *Education Index*.

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GRINNELL COLLEGE, at Grinnell, Iowa, first four-year college west of the Mississippi to reach the 100-year mark, observed its centenary throughout 1946.

Founded June 10, 1846, by the "Iowa Band," a group of young Congregational ministers from Andover Seminary who came to the Iowa Territory several years earlier, "each to found a church and all a college," Grinnell was first situated in Davenport, Iowa, as "Iowa College." In 1859 Iowa College, keeping its name, merged with "Grinnell University," founded in 1856 in Grinnell by Josiah Bushnell Grinnell, famed anti-slavery orator and friend of Horace Greeley, who addressed to him his famed admonition: "Go west, young man, go west!" Iowa College became Grinnell College in 1909 to avoid confusion with state colleges and universities.

Pioneers in more than the nickname they bequeathed to Grinnell's athletic teams, the founders and succeeding boards of trustees braved years of adversity to give the young college academic distinction in the liberal arts. When a cyclone in 1882 leveled almost every building and tree on campus, Grinnell's misfortune drew quick sympathy—and financial aid—from all parts of the country. Within a year three new and better buildings had replaced the old, and others soon followed. The present campus now extends over 74 acres, with numerous modern or modernized buildings and new ones being erected. Enrollment for 1946-47 went close to the 1,000 mark.

Grinnell was the first four-year college west of the Mississippi to admit women as candidates for degrees (1860), the first to play football and basketball and hold a track meet, the first to build dormitories, the first to develop intramural sports, and a pioneer in student self-government. A courageous faculty, unhampered by administrative restrictions, pioneered in developing departments of political science, natural science, and applied Christianity.

Since the beginning of accreditation by national educational associations, Grinnell has stood among the leading universities and colleges of the nation. It was on the roll of the North Central Association's first list of accredited institutions of higher learning (1912) and on the original list (1913) of approved institutions of the Association of American Universities. It is a member of the Association of American Colleges. Several undergraduate honorary associations, including Phi Beta Kappa, have chapters at Grinnell.

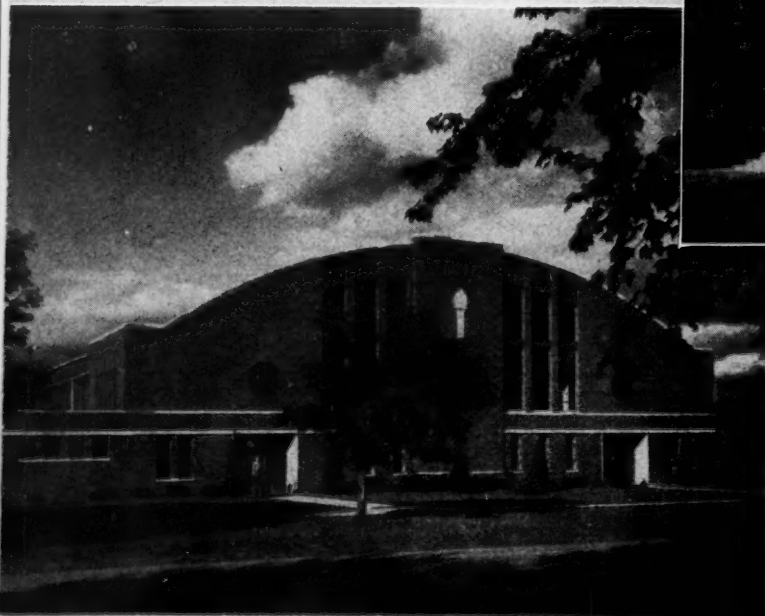
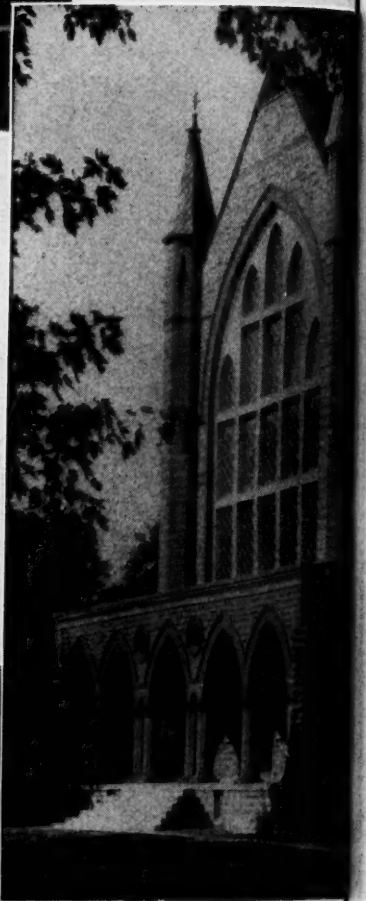


Grinnell College

Above: Men's Dormitories

Right: Blair Hall (Chemistry and Biology Laboratories; later to become Administration Building)

Below: Gymnasium and Field House



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UNESCO: International Experiment in Education

JOHN H. ESTERLINE

ON NOVEMBER 19, 1946, the opening of the first General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) brought to life an international entity unique in the history both of international relations and of education. UNESCO is an autonomous agency whose central purpose is "to contribute to peace and security by promoting collaboration among the nations through education, science and culture. . . ."¹ The Organization exists in formal relationship with the Economic and Social Council of the United Nations, an arrangement concluded under authority of Articles 57 and 63 of the United Nations Charter for "specialized agencies" of the United Nations.

The educational phase of UNESCO is the latest expression of half a century of effort by educators and by governments to secure international recognition of education as a factor in the maintenance of peace. An analysis of philosophies associated with the institutionalization of education on the international level, a history of the UNESCO movement together with a description of its present organizational structure, and a summary of its current program will assist in forming an evaluation of the new organization.

¹ UNESCO Constitution, Art. I.

EDUCATION AND INTERNATIONAL ORGANIZATION

Education, unfortunately, cannot easily be incorporated into the general scheme of international organization because it comprises an intensely personal element of national life, as variable in expression in different countries as are national languages and dialects. Education is the tool that shapes national culture and no two nations have identical views concerning how it should be used. Educators early recognized this diversity in educational methods and objectives as a principal barrier to effective international educational cooperation. However, they also concluded that even among sovereign states a certain liaison is possible whereby educational philosophies and methods can be directed towards maintaining and strengthening peaceful relations among nations. This is not to say that an identity of educational systems is possible, or even desirable, but that a similarity of purpose among national education systems is an essential condition of peace and can be fostered by educational co-operation among partners to such a general security system as the United Nations or the League of Nations. Moreover, and of even greater importance, it was recognized by educators that agreement by states on collective application of specific procedures when peace is threatened could just as easily be extended to include a reporting or investigating function whereby an international body charged with fostering educational co-operation could examine the educational systems of nations to ascertain whether, in fact, the effects of such education might constitute a menace to peace.

This is the philosophy expounded by such educational authorities as Isaac Kandel² of Columbia University and the late Grayson Kefauver of Stanford University.³ It avoids the weaknesses of scores of philosophies advanced in the *inter bella* period which ranged from a demand for an ephemeral "universal" curriculum of education among nations⁴ to the "university level" of co-operation fostered by

² See I. L. Kandel, *Intellectual Co-operation: National and International*, published under the auspices of the National Committee of the United States of America on International Intellectual Co-operation by the Bureau of Publication, Teachers College, Columbia University (1944).

³ Grayson N. Kefauver, "Peace Aims Call for International Action in Education," *New Europe*, vol. 3, pp. 17-18 (1943); "Education as an Important Factor in Achieving an Enduring Peace," *School Review*, vol. 52, pp. 16-25 (1944).

⁴ For an exposition of the "universal education" theory see Ira W. Howeth, "The Social Heritage and World Education," *Educational Review*, vol. 65, pp. 69-74 (1923).

the League of Nations' International Institute of Intellectual Co-operation. In this era fleeting attention was given to education in several inter-American conferences, worth-while but limited work was done by the quasi-public International Bureau of Education, and requests were made for "world friendship" periods, and other minor techniques of co-operation, in the schools of the nations by numerous, abortive, private educational associations with international affiliations.

UNESCO PLANNING

The concept of post-World War II educational co-operation among nations was originally the creature of a comparatively small number of educators of the United States, Great Britain and the democracies of Western Europe who, as early as 1941, began unofficial conferences to examine the prospect of governmental action. In Great Britain, the Council for Education in World Citizenship, the London International Assembly, and the then unofficial Conference of Allied Ministers of Education were active during the early war years. The Conference of Allied Ministers was primarily interested in physical post-war educational reconstruction in occupied Europe. In the United States the Educational Policies Commission of the National Education Association, the American Council on Education, the Liaison Committee for International Education under the direction of Grayson Kefauver, and the American Association for an International Office of Education were each prominent in formulation of plans.

After suggestions had been developed by these unofficial agencies as to specific ways in which educational reconstruction could be facilitated in Europe, and plans had been made regarding a post-war intergovernmental agency for educational co-operation, the United States government in 1944 signified its intention to participate in the London Conference of Allied Ministers of Education to provide "assistance in restoring essential educational facilities" of occupied countries.⁵ By 1945 the United States, through the Department of State, had assumed a leading role in the official planning while the planning itself, through the influence of the Department of State, had shifted in emphasis to projecting a post-war international educational agency along lines earlier advocated by such organizations in the United States as the Educational Policies Commission, the

⁵ *Department of State Bulletin*, vol. 10, no. 249, p. 299 (April 1, 1944).

Liaison Committee for International Education, and the American Association for an International Office of Education.

According to the United States Delegation to the UNESCO organizational conference at London in November, 1945, the decision of the Department of State to plan for a permanent post-war agency was reached on the basis of the Dumbarton Oaks proposals of September-October, 1944.⁶ These proposals envisaged a system of specialized agencies in various fields of co-operation, working in close relationship with the general United Nations organization through the co-ordinating activity of an Economic and Social Council.

The draft constitution for such an agency which the Department of State transmitted to the Conference of Allied Ministers in April, 1945, was accepted by that body after minor changes although the document outlined a much weaker agency than American educators had hoped for.⁷ Little authority as an observing and reporting agency was written into this blueprint for a post-war system of educational co-operation. Moreover, the matter of whether or not material or monetary assistance would be forthcoming for educational systems of liberated European countries under the terms of the draft constitution could not be positively ascertained. It remained for the United States delegation to the UNESCO organizational conference at London in November, 1945, to attempt to explain to delegates of other nations the apparent inconsistency of American policy on the point of assisting European educational reconstruction. The position of the United States became clear when the United States delegation took the view, according to Archibald MacLeish, that "the new organization could not and should not attempt to function as a relief agency in the sense of handling, collecting, or dispensing relief funds."⁸ The Delegation presented the thesis that it was the established policy of the United States government to contribute to relief and rehabilitation through the United Nations Relief and Rehabilitation Administration (UNRRA), an agency principally financed by

⁶ U. S. Department of State, *The Defenses of Peace: Documents Relating to UNESCO*, Part II, p. 8, Washington, Government Printing Office (1946), hereafter cited as *The Defenses of Peace*.

⁷ For text of draft constitution see United States Department of State Publication No. 2382, *Proposed Educational and Cultural Organization of the United Nations*, p. 6, Washington, Government Printing Office (1945).

⁸ "Report to the Secretary of State from the Chairman of the United States Delegation," in *The Defenses of Peace*, Part I, p. 7.

the United States. Actually, funds appropriated by Congress to UNRRA were sharply limited as to use and the limitations discouraged the use of such funds for educational reconstruction. Under these circumstances it is not difficult to understand why representatives of some nations at the conference felt that for the United States to refuse such assistance in fact, at the same time declaring the desire of the American people to participate in educational co-operation on a world wide scale, amounted to a basic contradiction in American aims.⁹ Practically speaking, the London Conference of Allied Ministers of Education experienced the humiliation of witnessing three years of planning for immediate post-war educational reconstruction vanish while the United States Department of State sketched plans for a proposed organization "the immediate purposes and functions of . . . [which] . . . were very much altered."

THE UNITED NATIONS AND EDUCATION

While the Conference of Allied Ministers of Education was deliberating the American proposal for a permanent international educational agency during the spring of 1945, the United Nations met in San Francisco to draw up a general instrument for post-war international organization. Although the Department of State strongly supported proposals to include references to education in the United Nations Charter, the United States Delegation, made up primarily of men and women in public life outside the Department of State, seemed reluctant to commit the United States to co-operation in that field. Despite this fact, the Charter which emerged from the San Francisco Conference makes seven specific references to the educational functions and responsibilities of the organization.

The portions of the document which refer to education reflect the concerted efforts of four nationally organized educational pressure groups, each of which was represented at the Conference by "consultants" attached to the United States Delegation. These pressure groups were the American Council on Education, the National Education Association, the Parent-Teachers' Association, and the American Association of University Women.

The use of the consultant group, an innovation of the Department of State, illustrated a new and successful technique for obtaining the opinion of national pressure groups on subjects considered at the

⁹ *Ibid.*, p. 8.

Conference. Forty-two national organizations, each highly geared to the molding of public opinion, were invited to send representatives to the conference. They represented labor, business, agriculture, women's activities, religious groups, war veterans and formal education. The consultants met on official Department of State call, with the Secretary, the Undersecretary, or members of the Delegation, according to the subject under consideration in the Conference, and also maintained continuous contact with their respective national organizations. They provided a quick and accurate sounding board of pressure group opinion for the guidance of the United States Delegation. Recommendations of the consultants to the Delegation apparently influenced that body and indirectly affected the final drafting of the United Nations Charter.¹⁰

The conference to consider the creation of an educational, scientific and cultural organization of the United Nations convened at London on November 1, 1945, upon the joint invitation of the governments of Great Britain and France. When the conference closed on November 16, it had drafted and approved a Constitution of the United Nations Educational, Scientific and Cultural Organization, an Instrument Establishing a Preparatory Educational, Scientific and Cultural Commission, and a series of resolutions. The resolutions concerned respectively the "media of mass communication and their place in UNESCO," plans for a working arrangement between UNESCO and the International Council of Scientific Unions, adult education, and a resolution specifying that the seat of the Organization should be in Paris.

THE UNESCO CONSTITUTION

UNESCO is, according to the United States Delegation which participated in drafting its constitution, an agency which should "function not only in the field specifically mentioned in the title but in all fields useful to the development of international understanding."¹¹ More specifically, the Organization is to advance the cause of international peace through educational, scientific and cultural relations among peoples. Hence the widest terms were used in selecting a title.

¹⁰ For an account of the activities of one pressure group, see William G. Carr, "The NEA at the San Francisco Conference," *Journal of the National Education Association*, vol. 34, no. 6, p. 123 (1945).

¹¹ *The Defenses of Peace*, Part II, pp. 13-14.

The preamble of the Constitution, following the tone of an address to the UNESCO constitutional conference by Prime Minister Atlee of Great Britain, emphasizes that the realization of mutual understanding among the peoples of the world is the central objective of the agency.

A curious characteristic of the document is a repeated reference to the term "mass communication," appearing not only in the preamble but also in the statement of the constitution regarding the agency's functions and purposes, and in a special resolution appended to the document entitled "Media of Mass Communication and Their Place in UNESCO." By its own statement, the American Delegation urged that the Organization should interest itself primarily in the exchange of information. Apparently the emphasis on "mass communication" is the result, principally, of this attitude of the American Delegation. In contrast to a relatively brief statement in the original draft constitution stating that the proposed Organization should "assist the free flow of ideas and information . . . through . . . the press, the radio and the motion picture,"¹² the approved constitution allocates a great deal more importance to "mass communication." Indeed, the entire preamble to the approved constitution hinges on the professed agreement and determination of:

the states parties to this Constitution . . . to develop and to increase the means of communication between their peoples and to employ these means for the purposes of mutual understanding and a truer and more perfect knowledge of each other's lives.¹³

Further implementation of mass communication occurs in the constitutional statement of functions which specifies that the Organization will "recommend such international agreements as may be necessary to promote the free flow of ideas by word and image."¹⁴ The resolution concerning the "media of mass communication" which was appended to the constitution again reiterates the importance of the concept to the delegates. In essence, the resolution charges the UNESCO Preparatory Commission with investigating all oppor-

¹² *Proposed Educational and Cultural Organization of the United Nations*, op. cit., Art II of draft constitution, p. 16.

¹³ "Preamble to the UNESCO Constitution," in *The Defenses of Peace*, Part I, pp. 13-14.

¹⁴ UNESCO Constitution, Article I, paragraph 2(a) in *The Defenses of Peace*, Part I. Hereafter references to the official text of the constitution reproduced in *The Defenses of Peace*, Part I, will be cited simply by article and paragraph.

tunities through which UNESCO could assist the development of and associate itself with the "media of mass communication."

The several pronouncements on "mass communication" are important because they are indicative of the means UNESCO will pursue to attain its central objective of mutual understanding among nations. The underlying implication in the matter of "mass communication" is that if people are well informed a contribution is made to mutual understanding. Whether application of this theory will, of itself, contribute to mutual understanding is doubtful. Nazi Germany proved that a nation can consist of well informed individuals who harbor ideas absolutely inimical to peace.

AN OBSERVING AND REPORTING AGENCY?

UNESCO apparently will not be an observing and reporting agency in the sense advocated for such an organization by Professor Kandel and by the Educational Policies Commission of the NEA. A general declaration of the constitution prevents the Organization from "interfering" in matters which are essentially within the domestic jurisdiction of member states.¹⁵ Apparently individual states can claim that whether or not they permit warlike tendencies to develop in their schools systems is a matter "within their domestic jurisdiction." The United States Delegation to the UNESCO organizational conference hastened to remark, however, that:

If a member of UNESCO utilizes its educational and cultural facilities in such a way as to endanger peace it runs the risk of having to submit to investigation and, if the matter proves serious, it may have to answer to the Security Council of the United Nations for its conduct.¹⁶

Actually, the only concrete provision of the constitution concerning reports by members is extremely weak. It merely specifies that:

Each Member State shall report periodically to the Organization in a manner to be determined by the General Conference, on its laws, regulations and statistics relating to educational, scientific and cultural life and institutions, and on the action taken upon the recommendations and conventions referred to in Article IV, paragraph 4.¹⁷

¹⁵ Article I, paragraph 3.

¹⁶ *The Defenses of Peace*, Part II, p. 18.

¹⁷ Article VIII. Article IV, paragraph 4, refers to the obligation which member states undertake of reporting to their respective "competent authorities" within one year after adoption by UNESCO, all conventions or recommendations proposed to them by the Organization.

If the agency is to assume any reporting function whatever, this constitutional provision must be substantially implemented "in a manner to be determined by the General Conference." As the reporting clause now stands, "periodically" could mean once every two or three or ten years. Actually, as the United States Delegation pointed out, "a member obviously cannot be compelled to furnish reports."¹⁸

UNESCO ORGANIZATION

The initial membership of UNESCO may include only members of the United Nations, all of whom are automatically eligible to join, although the constitution provides for accession of states not members of the United Nations upon recommendation of the Executive Board and confirmation by two-thirds vote of the General Conference. States only may be members and states suspended by the United Nations will be suspended by UNESCO upon request of the United Nations, while those expelled from the United Nations are automatically expelled from UNESCO.

The UNESCO constitution provides for a General Conference, an Executive Board and a Secretariat. The Conference is to consist of not more than five representatives from each member state appointed by their respective governments. Representatives are to be selected by the nations "after consultation with the National Commission, if established, or with educational, scientific or cultural bodies."¹⁹ Each member state is given one vote in the General Conference. A simple majority is sufficient for a decision except where the constitution specifically requires a two-thirds majority, e.g., the admittance of new members.

The General Conference determines policies, summons international conferences, submits proposals to the member states, elects the members of the Executive Board, appoints the Director-General, receives and considers reports submitted by member states and advises the United Nations in fields within its competence. The Conference is required to meet annually and to vary the location of its sessions from year to year.

The Executive Board, as defined in the constitution, is the agent of the General Conference and consists of eighteen members. It is charged with executing the program of the Conference and must

¹⁸ *The Defenses of Peace*, Part II, p. 32.

¹⁹ Article IV, paragraph 1. See p. 270 for explanation of term "National Commission."

meet in regular session at least twice a year. The chairman of the Executive Board must present to the Conference the annual report of the Director-General on the activities of the Organization. Members of the Board serve for three years and may be reelected but cannot serve more than two consecutive terms. In electing the members of the Executive Board, the General Conference is under obligation to "include persons competent in the arts, the humanities, the sciences, education and the diffusion of ideas, and qualified by their experience and capacity to fulfill the administrative and executive duties of the Board."²⁰

The Director-General of the Secretariat is the chief administrative officer of the Organization and is nominated by the Executive Board and approved by the General Conference for a term of six years.²¹ The Secretariat is to include also "such staff as may be required."²²

The constitutional provision concerning the establishment of national commissions as consultative bodies in member states is, in context, the weakest of three alternative provisions on this subject which were included in the original draft constitution. The approved document merely specifies that:

Each Member State shall make such arrangements as suit its particular conditions for the purpose of associating its principal bodies interested in educational, scientific and cultural matters with the work of the Organization, preferably in the formation of a National Commission, broadly representative of the Government and such bodies.²³

The United States Delegation explains the rejection by the UNESCO organizational conference of a stronger provision which would require the creation of a national commission or national co-operating body in each state, on the ground that "members of the Conference generally agreed that *compulsion* to form an *advisory* body involved obvious contradictions."²⁴

The national commission or national co-operating bodies:

shall act in an advisory capacity to their respective delegations to the General Conference and to their Governments in matters relating to

²⁰ Article V, paragraph 2.

²¹ Dr. Julian Huxley, British biologist, was chosen Director-General for a two year term only in November, 1946. The shortened term apparently was to appease strong opposition to the scientist from some quarters.

²² Article VI, paragraph 1.

²³ Article VII, paragraph 1.

²⁴ *The Defenses of Peace*, Part II, p. 23.

the Organization and shall function as agencies of liaison in all matters of interest to it.²⁵

Exactly how the constitution can insure that these commissions or bodies will "act in an advisory capacity" to delegations or to governments, or "shall function as agencies of liaison in all matters of interest" to UNESCO, is not clear since each member is given the latitude to "make such arrangements as suit its particular conditions" concerning the national co-operating bodies. Conceivably, no arrangements would "suit" some states.

Provision is made that UNESCO "be brought into relation with the United Nations Organization as soon as practicable, as one of the specialized agencies referred to in article 57 of the Charter of the United Nations."²⁶ The relationship was effected under article 63 of the Charter. Relations with other specialized agencies and international organizations, including non-governmental associations, are contemplated by the terms of the constitution.²⁷ The legal status of UNESCO is defined as being identical with that of the United Nations as set forth in articles 104 and 105 of the Charter. Amendments to the constitution become effective "upon receiving the approval of the General Conference by a two-thirds majority."²⁸ Fundamental alterations in the aims of the Organization or in the obligations of member states must, however, be approved by two-thirds of all the member states before they are effective. The Constitution came into effect in the fall of 1946 after it was accepted by twenty governments of the United Nations. The United States became a member during the summer of 1946 after President Truman, on July 30, signed a joint Congressional resolution authorizing the step.²⁹

THE UNESCO PROGRAM

During its Paris Meeting (November 19 to December 10, 1946) the UNESCO General Conference, comprising delegations from thirty-one member nations, adopted a program for the ensuing years which includes five major projects involving education:

²⁵ Article VII, paragraph 2.

²⁶ Article X.

²⁷ UNESCO has absorbed the properties of the International Institute of Intellectual Co-operation in Paris. Article XI, paragraph 3, of the UNESCO constitution permits such action.

²⁸ Article XIII.

²⁹ See U. S. Congress, *Congressional Record*, 79th Congress, July 23, 1946, "Conference Report on H. J. Resolution 305", pp. 9918-9919.

1. UNESCO will undertake an international study of methods of teaching international understanding in the elementary and secondary schools, and in institutions of higher learning.
2. UNESCO will launch a program of textbook revision under which it will request each member government to supply copies of its most commonly-used textbooks in history, civics, geography, and other subjects related to international understanding. Examination of the textbooks together with other teaching materials will be made by an international committee of experts who will report their findings, whether favorable or unfavorable, to the Second General Conference of UNESCO at Mexico City in 1947.
3. UNESCO will establish, in cooperation with the World Health Organization, a committee on health education.
4. UNESCO will establish a panel of experts to attack the world-wide illiteracy problem. This project, entitled "Fundamental Education," will be directed by specialists drawn from nations which have recently had successful programs for the eradication of illiteracy.
5. UNESCO will develop a world charter for the teaching profession. This is expected to be a statement of what the governments of the world are willing to approve in terms of social rights and economic status of their teachers and of the duties for which the teacher is responsible as a member of modern society.

The program for textbook revision appears to be the nearest approach to positive action aimed at the problem of educating for peace and security. Through this project UNESCO can become, in fact, an agency with the function of reporting warlike trends in national educational systems. Some \$6,950,000 was voted by the Conference to carry out the program for 1947, an amount which will be contributed on a pro rata basis by the various member governments. The budget figure is obviously nowhere near the figure of one billion dollars proposed by the United States National Commission for UNESCO.³⁰

The absence of a Soviet delegation at the Paris sessions of the General Conference was deeply felt although it was no surprise since the USSR had failed to send a delegation to the UNESCO organizational conference at London in November, 1945. At the earlier date, according to Benjamin Fine, New York *Times* correspondent, the Soviet Union maintained that deliberations on the educational and cultural aspects of the work of the United Nations should be con-

³⁰ U. S. Department of State, *Report of U. S. National Commission for UNESCO*, Department of State Publication 2635, Washington, D.C., 1946, p. 9.

ducted directly within, or under the auspices of, the Economic and Social Council.³¹

Whatever may have been the reason for the earlier refusal of the USSR to participate, a statement to a plenary session of the General Conference on November 21 by Vladislav Ribnikar, official Yugoslavian observer, was interpreted in delegation circles as the clearest and most outspoken explanation thus far of Soviet refusal to join UNESCO. Ribnikar, ostensibly explaining why his own government is hesitant to join, rejected the thesis expressed by Dr. Julian Huxley, UNESCO Director-General, that a world-wide common philosophy could reconcile Russian with Western capitalistic thought. The Yugoslavian insisted that UNESCO in its statement of principles had refused to take into account Marxist dialectical materialism and was thus preventing "intellectual co-operation among all the United Nations and especially between the Western countries and the Soviet Union."³² It was believed by many that the Soviet Union had chosen this means to tell the world that she would not allow any international cultural program to submerge her communist philosophy of government.

Possibly the greatest single stumbling block to success for UNESCO is the absence of the USSR from its membership. One as closely associated with the UNESCO movement as Archibald MacLeish told a news conference in Paris during the UNESCO meetings that without the Russians "UNESCO has two strikes against it and a third coming up."³³ This view, however, is not universal. In the words of an observer to the General Conference meeting, "If UNESCO may not be a bridge it can be a wall!"

³¹ See *New York Times*, November 2, 1945, p. 2.

³² *New York Times*, November 21, 1946.

³³ See *New York Times*, November 20, 1946.

The Measurement of Academic Adjustment

HENRY BOROW

IN A RECENT article appearing in this JOURNAL,¹ the writer called attention to the slow progress which has been made in the prognosis of academic proficiency on the college level. Despite the adoption of more objective grading methods and the gradual refinement of aptitude testing methodology, most of the variations occurring among college students in measured scholarship is not ascribable to factors assessed by our orthodox tests of educational aptitude. Moreover, some evidence is at hand to suggest that the factor of grade unreliability has been made to bear too large a portion of the blame for the low correlations obtained between aptitude test scores and scholarship.

The writer² has suggested that the limited predictive value of typical educational aptitude tests and entrance examinations resides partly in their failure to appraise the non-intellectual determinants of academic performance. Such tests often yield worthy indices of the prospective student's ability to comprehend and assimilate subject-matter on the collegiate level. As such, they reveal primarily what intellectual resources and potentialities the student will bring to the classroom. Yet they give no direct indication of how fully the student will capitalize upon his educational promise. Very probably this is why the simple high school graduation rank, despite its obvious flaws as a measurement device, has matched the more sophisticated and the more painstakingly molded educational aptitude test as a forecaster of college achievement. A student's high school graduation rank reflects, however roughly, his self-application to studies as well as his educational ability and achievement. This is less true of formal aptitude tests.

The importance of assessing the role played by non-intellectual factors in academic performance has not gone unrecognized by educational research workers. Many attempts have been made to demonstrate how measurable motives, work practices and environmental

¹ Borow, Henry, "Current Problems in the Prediction of College Performance," *Journal of the American Association of Collegiate Registrars*, XXII (Oct., 1946), pp. 14-26.

² Borow, *op. cit.*

contingencies may shape the student's achievement. In his preceding article, the writer³ drew upon the research literature for evidence of the contributions to scholarship of such factors as the student's vocational and educational motives, his study practices and use of time, his health, participation in extra-curricular affairs, and efforts at self-support. The inevitable conclusion to be drawn from such a survey of experimental findings is that the influence upon scholarship of personal factors other than ability is more than a hypothesis. Although one could wish for a more thoroughgoing body of evidence than is now at hand, he cannot easily cast aside the recurrent inference that high test-measured aptitude will not be accompanied by satisfactory educational attainment if this superior aptitude operates against a background of motives and habits which are inimical to total academic adjustment.

Yet many workers who readily concede the importance of non-intellectual influences upon academic achievement question whether they are susceptible to measurement which is accurate enough to justify their use in student selection and guidance procedures. Some contend, for instance, that practical means do not exist for gauging the direct effect of motivational factors upon scholarship. Indeed, numerous studies which have employed personal data items and personality trait tests in the prediction and diagnosis of college performance have yielded disappointingly low validity coefficients. Two interdependent circumstances have been set forth elsewhere⁴ as possible explanations of this fact. One concerns the inability of psychologists to define traits of personality as objectively and in such basic terms as has been done for human abilities. What has not been adequately defined cannot be adequately measured. The second explanation relates to the comparative newness of the field of personality measurement. The potentialities of tests of personality as aids in educational prognosis and diagnosis have but recently begun to receive serious research attention.

Behind the failure of student personnel workers to obtain closer relationships between personality test scores and academic grades lies a third and, perhaps, more salient condition. Most personality-type tests were not originally designed and validated with reference to academic criteria, and accordingly their titles and trait names may

³ Borow, *op. cit.*

⁴ Borow, *op. cit.*, pp. 19-20.

become artifacts when applied to the scholastic setting. For instance, a scale which bears the trait name "emotional stability" may, by virtue of its design, render some usefulness in screening pre-psychotic individuals, and yet fail to ferret out of the representative college group those students who are making inadequate academic adjustments. One can agree with Thornton,⁵ who reasons, in a discussion of persistence tests, "The best way to increase the value of objective personality tests as means of predicting scholastic achievement is not by making the tests better measures of persistence, but rather by planning the test situation to resemble more closely the tasks and social relationships found in the classroom." In this regard, it would appear significant that some of the more encouraging college results obtained with personality-type scales have come from investigations in which these measures were either developed or revalidated directly in terms of academic behavior. One such measure is the *Young-Estabrooks Studiousness Scale*, a key developed for use with the *Strong Vocational Interest Blank for Men* in which the items are weighted in proportion to their success in differentiating between academic overachievers and underachievers. The usefulness of this scale in academic prognosis has been examined in studies by Young and Estabrooks,⁶ Williamson,⁷ Mosier⁸ and others. The *Study-Habits Inventory* by Wrenn⁹ is an example of an instrument whose items were both developed and validated directly against academic performance with the intelligence variable held constant.

In the belief that personality attributes are often cogent factors in scholarship and, further, that measures of such attributes promise

⁵ Thornton, G. R., "The Use of Tests of Persistence in the Prediction of Scholastic Achievement," *Journal of Educational Psychology*, XXXII (1941), pp. 266-273.

⁶ Young, C. W. and G. H. Estabrooks, "Report on the Young-Estabrooks Studiousness Scale for Use with the Strong Vocational Interest Blank for Men," *Journal of Educational Psychology*, XXVIII (1937), pp. 176-187.

⁷ Williamson, E. G., "An Analysis of the Young-Estabrooks Studiousness Scale," *Journal of Applied Psychology*, XXI (1937), pp. 260-264. Williamson, E. G., "A Further Analysis of the Young-Estabrooks Studiousness Scale," *Journal of Applied Psychology*, XXII (1938), p. 105.

⁸ Mosier, C. I., "Factors Influencing the Validity of a Scholastic Interest Scale," *Journal of Educational Psychology*, XXVIII (1937), pp. 188-196.

⁹ Wrenn, C. G., *Manual for the Study-Habits Inventory* (Revised), Stanford University, California: Stanford University Press, 1941. Wrenn, C. G. and W. J. Humber, "Study Habits Associated with High and Low Scholarship," *Journal of Educational Psychology*, XXXII (1941), pp. 611-616.

to be most effective when developed in the academic setting in which they will be used, the writer undertook a study of the role of certain arbitrarily defined non-intellectual characteristics in shaping the achievement of college students. The tacit hypothesis of the study was that, of the disparity between predictions of scholastic proficiency (predicated upon educational aptitude test performance) and demonstrated proficiency (as measured by earned grades), an important and measurable part is attributable to the operation of attitudes, aspirations and personal practices not directly evaluated by tests of academic aptitude. A preliminary objective of the investigation was to test the efficacy of a series of personal data items in discriminating between two groups of college students:

- (a) Students whose actual academic achievement distinctly surpassed predicted achievement based upon college aptitude test scores, and
- (b) Students whose actual academic achievement fell distinctly beneath predicted achievement.

A search was made for behavior situations which were suggestive of good or poor academic adjustment. Material was assembled from textbooks on study habits and college adjustment, from inventories and scales of personality traits, interests, attitudes, and study habits and skills, and from the writer's own experience in interviewing students in the Psycho-Educational Clinic at The Pennsylvania State College. From these sources, a file of items numbering more than one thousand was developed, principally of the direct-question type. Approximately four hundred of these were selected for inclusion in a preliminary questionnaire, all of which were tentatively assumed to be dealing with student motives, attitudes and practices related to the caliber of academic performance.

The initial step in psychometric analysis entailed the validation of the individual items with reference to a criterion labeled the "index of academic adjustment." This index may be defined as the simple algebraic difference between a student's expected grade-point average, predicted from educational aptitude test scores, and his actual grade-point average. By this approach, predictions of academic achievement were computed for nearly two thousand students who represented four successive classes matriculating at The Pennsylvania State College. These predictions were made from scores on *The Pennsylvania State College Examination for Admission*. The freshman-year

grades of these students were later compared with their respective predictions. Each student whose attained freshman grade-point average exceeded his predicted average by at least one probable error of estimate (high index of academic adjustment) was termed a "positive deviate" and was selected for further study. Similarly, each student whose attained freshman average fell beneath his predicted average by at least one probable error of estimate (low index of academic adjustment) was termed a "negative deviate" and was chosen for additional study.

Two hundred college women were found whose grade attainment fell outside the arbitrarily-established limits of one probable error of estimate. One hundred of these subjects were positive deviates and one hundred were negative deviates. In the same manner, two groups of college men were selected, one comprising ninety-five positive deviates, and the other, ninety-five negative deviates. Thus divided according to the index of academic adjustment, the positive and negative deviates of each sex were used as criterion groups in an item analysis of the preliminary questionnaire. On the basis, primarily, of an item's ability to differentiate reliably between the positive and negative deviates of one or both sexes, a series of valid items was selected and subjected to additional experimental scrutiny. After a secondary set of specifications dealing with item merit had been employed to pare the list of items still further, the final number of usable items became ninety.

The writer tentatively sorted the valid items into what he deemed to be logical groupings, each grouping or category presumably dealing with an important area of academic adjustment of a relatively non-intellectual type. Six categories of academic adjustment were developed in this manner. Following an examination of the items tentatively included in each category, a descriptive title was chosen to designate the category and, correspondingly, a brief verbal description was prepared of the area of academic adjustment which the category purportedly evaluated. The six adjustment categories developed by this procedure, and sample items found in each category, are listed below:

Curricular Adjustment

This area appraises the student's expressed satisfaction with college routine in general and with his chosen curriculum in particular. It seeks

to discover whether he likes his work, enjoys studying, and desires to continue in college, and further, whether he feels he has chosen his curriculum wisely, is content with this choice, and finds his courses interesting, purposeful, meaningfully related to one another, and reasonable in their demands upon his time and effort.

Sample Items:

Have you often thought seriously of changing your curriculum?

Have you found good reasons for knowing the material in each of your courses?

Do you sometimes think it a waste of time for you to continue your college education?

Maturity of Goals and Level of Aspiration

This category is concerned with three intimately related segments of the student's academic adjustment: his educational and life goals, his desire and effort to achieve them, and his sense of values. It purports to ascertain whether his present activities, including his attendance at college, have an acknowledged place in a carefully conceived plan for the future, whether he has "found himself", knows the direction he is following, distinguishes between the important and the unimportant, and has a sense of responsibility toward his serious obligations, and finally, whether he perseveres without prodding and strives diligently to attain his goals.

Sample Items:

Have you set certain definite goals for yourself which you hope to achieve during your college career?

Are you sometimes indifferent or apathetic about matters which have considerable importance for your personal welfare?

Personal Efficiency: Planning and Use of Time

The effectiveness with which the student schedules and carries out his daily activities is investigated by this category. The aim is to learn whether he plans his routine responsibilities in such a way that he is able to make profitable use of his time or whether, on the other hand, the presence of such irregular habits as oversleeping, frequent trips home or disproportionately great amounts of time devoted to outside activities and recreation is reflected in inadequate study, poor or tardy preparation of outside assignments, and other manifestations of student inefficiency.

Sample Items:

Do you customarily anticipate and plan your work for the next several days?

Do you sometimes oversleep so that you miss classes?

Are you always able to get your class assignments completed by the specified date?

Study Skills and Practices

This category deals with the subject's characteristic study behavior at his desk, in the classroom, and during examinations. It surveys, first of all, the conditions under which he attempts to learn. Does he, for example, enter the study situation with a readiness to learn, with an alert, active attitude that facilitates absorption in his task and the effective assimilation of new material? Or does he, on the contrary, make a passive adjustment to learning as evidenced by his stalling for time, dozing off, wool-gathering, division of attention between the work at hand and diversions such as the radio, and ultimately, failure of accomplishment at his desk or in the classroom? The category also assesses the student's mastery of sound study techniques, his ability to ferret out the crucial points of the assignments, to outline, to take notes and use the library, and his practice of spaced learning and self-recitation during study. Sources of difficulty in reading, and in preparing for and taking examinations are also tapped by this category.

Sample Items:

Do you sometimes study with the radio going or with other persons talking in the same room?

Do you extend your preparation for an examination over several days?

Do you have difficulty remembering what you have just read when you complete a reading assignment?

Mental Health

The items in this category converge on the status of the student's emotional adjustment. The attempt here is to ascertain to what extent he is beset by recurring worries and emotional upsets which interfere with an outward, efficient attack upon real problems. Common symptoms of mental maladjustment are investigated, such as excessive daydreaming, fluctuation of moods, depression, homesickness, lack of self-confidence, feelings of failure and insecurity, and immoderate concern with trifling thoughts and petty disturbances.

Sample Items:

Do you sometimes feel that you allow your thoughts to dwell too much upon your home and family?

Are you bothered constantly by some worry or concern so that you cannot concentrate on your work?

Do you sometimes feel that you are not doing anything well?

Personal Relations (with faculty and associates)

This area investigates the student's ability to get along with instructors and colleagues as reflected principally in his attitudes toward them. The items inquire about the degree of congeniality and of mutual trust and respect which exists between him and his instructors, and less directly, about his cooperativeness, social status in his group, and the extent of wholesome "give-and-take" between him and his associates.

Sample Items:

Do you find that your professors are honest and straightforward in their dealings with you?

Do you greatly dislike being told how you should do things?

Following the development of the foregoing series of adjustment categories, the co-operation of a group of twenty-one judges was enlisted in an attempt to secure a logical placement of the ninety valid items within the six-category arrangement. Each of the judges, who were psychologists and allied student personnel workers, was provided with a random-order set of the ninety items, the six category titles and descriptions, and a set of uniform instructions for carrying out an independent placement of each item into the appropriate diagnostic category of academic adjustment. This scheme for item allocation was thus predicated upon the clinical judgments of counselors rather than upon such psychometrically structured approaches as factorial analysis or internal consistency. Results showed a high degree of consistency among the judges in the allocation of items to adjustment categories. This would suggest that the typical questionnaire item possessed a reasonably standard diagnostic meaning for the co-operating judges.

On the basis of the results yielded by the item placement procedures, a final category assignment was effected for each item. A second or final inventory was then developed in which the items were grouped according to the category of final assignment. This in-

ventory, entitled the *College Inventory of Academic Adjustment*, was next studied with regard to its contribution in explaining the persistent disparity between academic promise and later scholarship. For this purpose, two criteria were selected, the freshman grade-point average and the index of academic adjustment.

With reference to the first criterion, zero-order, partial and multiple correlations were computed for new samples of men and women students involving the relationships of the *College Inventory of Academic Adjustment* and *The Pennsylvania State College Examination for Admission* to each other and to freshman academic achievement. The pertinent findings may be presented briefly. All parts of the *Inventory* except part six (Personal Relations with Faculty and Associates) yielded significant, although relatively low, correlations with first-year grades. The composite score on the *Inventory* correlated .30 with grades. When the six parts of the *Inventory* were weighted a multiple correlation of .38 with freshman achievement resulted. Composite *Inventory* scores showed a negligible correlation of .03 with total aptitude test scores. This last finding may be taken as additional evidence that the *College Inventory of Academic Adjustment* is measuring an aspect of behavior apart from that characteristically sampled by tests of educational aptitude.

The Pennsylvania State College Examination for Admission correlated .49 with freshman achievement. When the six parts of the *College Inventory of Academic Adjustment* were added, the resulting battery yielded a multiple correlation of approximately .60. It would seem evident, then, that the gross grade-prediction errors resulting from the use of an aptitude test alone are, in part, explicable on the basis of such non-intellectual attributes as those assessed by the *Inventory*.¹⁰

It should be mentioned that the findings here reported for the women's sample were essentially those obtained with men students. The composite *Inventory* and freshman academic performance yielded a correlation of .36 for the men's sample. When the six parts of the *Inventory* were treated as a battery, the multiple correlation which this test produced with grade achievement became .51. Again, whereas *The Pennsylvania State College Examination for Admission* corre-

¹⁰ Restricted criterion ranges for both men and women students reduced all validity coefficients reported in this study below normal expectation.

lated only .30 with scholarship, the addition of the six parts of the *Inventory* provided a seven-variable battery which raised the correlation (multiple) to .56.

As previously noted, a second approach to validation was made in which the index of academic adjustment was employed as the criterion. The index was computed for each of the 301 women students used in the initial validity study of the *College Inventory of Academic Adjustment*. A predicted grade-point average was first calculated for each subject and then compared with the average actually obtained. Using the probable error of estimate once more in classifying the prediction-achievement discrepancies, the writer identified eighty-one positive deviates and sixty-seven negative deviates. The comparative scores of positive and negative deviates on the six parts of the *College Inventory of Academic Adjustment*, as well as on the composite *Inventory*, may be seen in the accompanying table.

College Inventory of Academic Adjustment	Means		Standard Error Ratio
	Positive Deviates	Negative Deviates	
Part 1: Curricular Adjustment	18.31	15.22	4.55
Part 2: Maturity of Goals and Level of Aspiration	22.05	18.90	3.74
Part 3: Personal Efficiency: Planning and Use of Time	23.46	17.55	5.86
Part 4: Study Skills and Practices	30.05	25.61	4.44
Part 5: Mental Health	19.81	16.46	3.56
Part 6: Personal Relations (with faculty and associates)	18.94	17.96	1.43
Composite Score	132.62	111.70	5.74

Once again, the inference may be drawn that academic performance is significantly associated with aspects of behavior beyond that of sheer intellectual ability. Fundamentally different patterns of responses were registered by positive and negative deviates on all sections of the *College Inventory of Academic Adjustment* except part six. Inspection of the table reveals that overachievers and underachievers were most clearly differentiated by part three (Personal Efficiency: Planning and Use of Time) and by the composite *Inventory*.

Some of the conclusions to be drawn from this phase of the investigation may be briefly reviewed:

1. Of the items which differentiated between the positive and negative deviates of one sex, the majority evinced discriminatory effectiveness for the other sex as well. Viewed purely in the statistical sense, most of the items appeared to possess similar characteristics of validity for both men and women students. For example, the item which asks "Do you sometimes oversleep so that you miss classes?" drew markedly different responses not only from women overachievers as a group, as against women underachievers, but from men overachievers as distinguished from the underachievers among this sex.
2. The extent to which differences in grade achievement were accounted for by scores on the scholastic aptitude test was reliably increased when this measure was supplemented by the *College Inventory of Academic Adjustment*. This was true for both men and women students.
3. Women¹¹ who were positive deviates were distinguished from negative deviates by composite scores on the *College Inventory of Academic Adjustment*. Judging from their responses to this questionnaire, the pattern of academic motives, attitudes and practices of overachievers as a group differs sharply from that which typifies the underachievers.
4. Women who overshot academic expectancy indicated a distinctly more profitable use of time and a more effective scheduling of daily activities than was true of women who failed to redeem their academic promise.
5. Academic overachievers among women students expressed greater satisfaction with college life and with their curricular choices than did those who fell beneath scholastic expectation.
6. Women positive deviates signified greater seriousness of educational purpose and a more pronounced tendency to strive for the achievement of established goals.
7. Women positive deviates professed greater adherence to effective learning practices, both at their study tasks and in the classroom, than did women negative deviates.
8. Women students who surpassed their predicted level of scholarship reported the presence of worry, moodiness and other symptoms of emotional maladjustment less frequently than did women who fell beneath their scholastic expectancy.

Another phase of the research undertaken with the *College Inventory of Academic Adjustment* concerned the diagnostic value of

¹¹ Because of the absence of an adequate men's sample, a follow-up study of the *College Inventory of Academic Adjustment* in relation to the index of academic adjustment was not carried out with men positive and negative deviates. Hence, conclusions 3 to 8 inclusive refer to women students only.

the six adjustment categories embraced by this instrument. The aim in this instance was to ascertain the usefulness of the category scores in identifying sources of academic maladjustment. The chosen technique of investigation was merely exploratory and permitted only tentative inferences regarding the issue under scrutiny. For purposes of this study, well-known trait tests were used as criteria. An attempt was made to select tests which purported to measure areas of adjustment suggested by the category titles of the *College Inventory of Academic Adjustment* and which, in addition, had given evidence that they possessed some usefulness for measuring these areas. The tests chosen were the *Wrenn Study-Habits Inventory*, the four scales of the *Bell Adjustment Inventory*, and the Emotional Stability and Dominance-Submission scales of the *Bernreuter Personality Inventory*. One hundred and thirty women were used as subjects.

It was hoped that correlations between these measures and the six parts or categories of the *College Inventory of Academic Adjustment* would provide at least a first means of assessing the diagnostic effectiveness of the latter instrument. The results, however, were not clear-cut. Close correspondence was frequently found between scores on the various categories of the *Inventory* and scores on the criterion tests with which they might logically have been expected to show highest agreement; yet many substantial relationships were also obtained between *Inventory* parts and criterion measures which appeared, on the surface, to have little in common. For instance, part four of the *Inventory* (Study Skills and Practices) correlated most highly with the *Wrenn Study-Habits Inventory* among the criterion tests. This value was found to be .71. Yet the composite score on the *College Inventory of Academic Adjustment* correlated even more highly, .78, with the Wrenn measure. In a similar manner, part five of the *College Inventory* (Mental Health) correlated .74 with the Emotional Adjustment scale of the *Bell Adjustment Inventory*; yet the Study Skills and Practices score and the composite score on the *College Inventory* yielded correlations as high as .47 and .56, respectively, with the Emotional Adjustment scale of the Bell questionnaire.

These data would appear to suggest that what seem to be fairly discrete areas of student adjustment may actually be correlative manifestations of a more fundamental behavior pattern which pervades them all. One could obviously contend, for instance, that a severe conflict related to the home might readily be reflected as maladaptive

behavior in such areas as the student's use of time, his study practices, educational motives and level of aspiration. This belief is further buttressed by the intercorrelation matrix for the *College Inventory of Academic Adjustment* which disclosed pronounced interdependency among its six categories.

SUMMARY

An important part of scholastic performance can be accounted for by certain aspects of student behavior which are not associated with intellectual aptitude for college work. That some students tend to exceed academic expectation, as based on educational aptitude test scores, whereas others fail to live up to scholastic promise, is shown to be associated in part with certain fairly characteristic differences in the scholastic attitudes and practices of these two groups.

Whereas many personality trait tests and questionnaires have given evidence of little relationship to the caliber of academic performance, instruments which are developed and validated directly within the scholastic setting exhibit considerably more promise in this regard. It has been within such a framework that the *College Inventory of Academic Adjustment*, herein described, has been developed.

Since, by its very nature, such a measure as the *Inventory* presupposes some student experience in the academic milieu, it does not lend itself readily to use as a prognostic device. It cannot, for example, be meaningfully used with applicants for admission to college. The principal use of a measure such as the *College Inventory of Academic Adjustment* is in student counseling, and particularly as an aid in the identification of sources of academic maladjustment. Even here, its use must be judicious. Low diagnostic category scores may often be merely symptomatic of more deep-seated difficulties which themselves must be uncovered and treated. If one assumes this to be true, the use by the counselor of arbitrarily established categories of academic adjustment, such as "use of time," "study practices," "interest in work," and the like, become merely the first step in the diagnosis of student difficulties. In this connection, it may be suggested, finally, that the *individual* item responses will frequently become more searching tools than category scores and composite test scores in the hands of the skilled clinician during diagnostic counseling.

The Use of the USAFI General Educational Development Tests

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THREE general types of educational experience are recognized in the training received by servicemen. The first of these consists of their formal educational activities, correspondence courses and various types of group instruction. The second consists of the technical service training programs. The third, the one in which we are primarily interested at the moment, consists of the incidental and individual experiences such as observation, travel, reading, movies, lectures, discussion, etc. It was for the evaluation of this type of experience that the Tests of General Educational Development were devised. The high school level tests are designed to measure the extent to which a student has secured the equivalent of a general (non-technical) high school education. The college level tests are designed to provide a measure of the general educational development resulting from informal self-education whether actually involved in or incidental to military service.

In talking about the G.E.D. Tests it is well to be specific about their purpose as is illustrated by an experience of the past summer. A mother inquiring about the possibility of credit for a veteran son (discharged for several months but not present at the interview) chanced to mention that a neighbor's son had been allowed some college credit by tests. I started to explain that these were probably the G.E.D. tests which had been developed to evaluate off-duty experience—but at this point I was abruptly stopped by the very determined remark, "We need not consider those; my son is a good boy and had no such experiences."

At this time it would seem that the use of the G.E.D. High School level tests has met with fairly general acceptance by high schools and colleges. From a statement sent out by the Veterans' Testing Service it appears that of the 48 states only 3, Maine, New Jersey, and New York, do not recognize the G.E.D. tests for granting either a diploma or a statement of equivalency. Twenty-one states grant a regular high school diploma, 19 grant a certificate of equivalency, and 16

grant either a certificate of equivalency or a diploma but require 1 to 8 school units completed in residence. Obviously these figures mean that some states have more than one procedure. This results from the following situations:

1. In some cases the State Department of Public Instruction issues a statement of equivalency while the individual schools issue regular diplomas.
2. In other cases diplomas may be issued if a certain number of high school units has been earned and a certificate of equivalency otherwise.
3. In still other cases there seems to be no clear-cut distinction between diplomas and certificates of equivalency.

In 12 cases, the state department is the issuing agency for diploma or certificate, in 18 cases the local school is the issuing agency, and in 15 cases both the state department and the local school may issue the diploma or certificate.

What should be the attitude of the college toward an applicant who presents a diploma or certificate earned by the G.E.D. route rather than the traditional one? Logically, its attitude should be the same as toward any other applicant. Most colleges do not accept all high school graduates and likewise they should not accept all veterans presenting G.E.D. diplomas. The recommended standards for award of a diploma by use of G.E.D. tests (and these are almost universally followed) are so set that about 80 per cent or more of high school graduates could qualify. Standards for award of a diploma and standards for college admission are generally quite different. Ordinarily, Michigan State College accepts only high school graduates in the upper 50 per cent of their class and so we accept for regular college work only veterans whose average performance on the G.E.D. tests is at the 50th percentile or above. Those below this point are accepted in the Servicemen's Institute for high school refresher work but not in Basic College. Colleges in general would do well to set percentile score standards on the G.E.D. tests which will admit about the same percentage of veterans as is on the average admitted of regular high school graduates. Birmingham-Southern College has followed this policy in requiring an average percentile rating of 60 with no score falling below the 50th percentile. Where a college has used a satisfactory entrance examination of its own, it may be better

to require that examination of all men who have not already taken the G.E.D. tests.

A question may be raised concerning the success of veterans admitted by G.E.D. tests to college courses. Aside from mathematics, it is no longer possible to point out a college course for which specific high school courses are prerequisites. Intelligence, vocabulary knowledge, reading ability, and maturity appear to be the only essential factors in college success which bear any relationship to high school experience. The first three of these are measured in adequate fashion by the G.E.D. tests and most veterans possess the necessary maturity. Hence, it may be expected that selection by means of the G.E.D. tests will be fairly satisfactory. In a survey made last spring Dr. T. N. Barrows, Director of the Commission on Accreditation of service experience of the A.C.E., found that 80 per cent or more of the higher institutions contacted were using the high school level G.E.D. tests as a basis for admission. (This and other statistics which follow were communicated in a letter from Dr. Barrows and have not yet been published.) All institutions with a considerable amount of experience indicated that the G.E.D. tests, high school or college level, were remarkably good admissions instruments and an excellent basis for predicting college success.

The college level G.E.D. tests present a different problem. Some college professors have a low opinion of the value of high school work and are quite willing to accept students on other bases than high school graduation—in fact, they even get a sense of satisfaction out of it because it provides a sort of proof of their contention. However, to imply that a certain level of performance on a G.E.D. test in "Blank" might be the basis for granting credit in their freshman course in "Blank" is to court instantaneous and severe denunciation. Nevertheless, about 10 per cent of the colleges and universities contacted last spring by Dr. Barrows are granting substantial credit in freshman English and in survey courses in Literature, Science, and Social Science by the college level G.E.D. tests. Another 10 per cent indicated that provision for such credit existed but nothing much was being done about it.

Whether credit is granted or not would appear to depend on three main factors:

1. the extent to which the college accepts the philosophy underlying the construction of the G.E.D. tests.

2. the extent to which the college has used examinations in the past as a basis for granting credit.
3. the extent to which duplication of credit may be involved.

The philosophy underlying the G.E.D. tests involves the idea that the first two years of college are designed to provide a broadly cultural liberal education and that this will be done in part through survey type courses in English, Social Science, Science, and Literature. It is further assumed that the lasting outcomes of such courses are not the detailed descriptive facts which are taught, but broad concepts, generalizations, attitudes, skills, habits of thought, and improved judgment. The tests were developed to measure these ultimate outcomes by setting a reading situation in which the student interprets, evaluates critically, and employs in his own thinking, information and ideas which are presented to him in print. The passages for reading are carefully selected so that they can be readily comprehended and interpreted only by people who already have an excellent background of experience and fundamental knowledge in the field involved, and who have done some thinking about the problems and concepts in that field.

All of this may be stated in another and perhaps similar way. A veteran who performs well on the G.E.D. Social Science Examination is as ready to go on with other courses in that area as is the student who has completed a freshman or sophomore social science survey. If the veteran does not choose to take more social science, he still has as much mastery of the field as the student who has completed the survey course will have after a year or two has elapsed. Finally, the philosophy behind the G.E.D. tests assumes that if this be true the veteran should have the credit carried by the survey course.

The second factor mentioned was that of the extent to which a college has used tests as a basis for credit. In a school where credit has traditionally been awarded only by means of instructors' course grades, the use of the G.E.D. tests meets with little favor. Where there has been a definite and liberal policy of encouraging students to try for advanced credit by means of examination the tests are apt to meet with more favor except that where credit in the survey or introductory type of course is already based entirely on examinations the G.E.D. tests are apt to attract little interest as a basis for award of

credit. Hence the University of Chicago, Michigan State College, and other institutions with established programs of comprehensive examinations are not greatly concerned with the G.E.D. College Level Tests.

A third factor retarding the use of the G.E.D. tests for granting of college credit is the matter of duplication of credit. Almost all colleges are granting credit for service schools, correspondence courses and successful passing of USAFI subject or end-of-course tests. To grant credit for the G.E.D. tests performance also would be duplicating credit since most veterans applying for credit by G.E.D. tests also apply for other credit. This point of view is sound and is the one taken by many colleges which refuse to recognize the G.E.D. tests.

A question is occasionally raised concerning the use of the G.E.D. tests for guidance purposes. Little has been said about this so far and not a great deal can be said. Guidance related to these tests is almost entirely a matter of guidance relative to continuing education and to selection of courses. The results are used by our counselors in advising students but there is no set pattern for so doing. One is reminded of the use of psychological test scores by two different deans in dealing with scholarship cases. One dean was inclined to drop at once a student with low scholarship and high ability because he obviously was not working. Another was inclined to continue the individual in school because of his apparent ability and with the hope that he would find himself. Somewhat similarly a counselor may under certain conditions, advise a veteran who shows weakness in a certain area on G.E.D. tests to avoid that area. Again he may counsel the taking of courses in that area for the sake of a well-rounded general education. In only one way have we at M.S.C. worked out a fairly definite policy of counseling by use of G.E.D. tests.

When an M.S.C. veteran has taken the college level G.E.D. test related to a certain basic course and has made a high rating he is advised that he should be able either by some additional study on his own part or by taking one or two terms of the three term basic course to prepare for and pass the regular comprehensive examination. This enables us to maintain a consistent policy for award of credit in basic courses and still accomplishes the main purposes involved in the use of the G.E.D. tests. It involves a compromise between the granting of credit purely on the basis of ultimate outcomes

or residual effects and on the basis of knowledge of specific facts, since our comprehensive examinations utilize the G.E.D. approach testing to the extent of about 50 per cent of the examination and test specific factual knowledge in the remaining 50 per cent of the examination.

These remarks have tried to give a picture of general practice with regard to G.E.D. tests and also of specific practice at M.S.C. In conclusion, it seems to me that the essence of the whole problem of using G.E.D. or other tests as a basis for award of credit is in a more careful definition of the outcomes of both high school and college education. If the high school G.E.D. tests involve all the essential outcomes of a high school education (and this is not certain) then the practice of granting diplomas on the basis of these tests should be continued and extended. If the G.E.D. tests do not, it should be possible to develop other tests which will. Likewise, it should be possible to define the outcomes of college education and construct tests measuring these outcomes so that ultimately college diplomas or certificates of equivalency may also be issued by examination.

Grade Records and Tabulating Machines

MAX FICHTENBAUM AND W. B. SHIPP

WE HAVE been using IBM machines at The University of Texas since 1930. Originally our plan was to use the equipment for statistical purposes only. However, we have constantly expanded our uses, and now in addition to doing our statistical work on IBM machines, we prepare grade reports for parents, students, and administrative offices; post grades on permanent record cards through the use of a transfer posting machine; and do a number of other tasks involving grades, etc. The Finance Office reproduces data from our grade cards as a basis for preparing bills for veterans' accounts to be sent to the Veterans Administration. These bills are also prepared with IBM equipment in the Finance Office.

It would appear that tabulating machine equipment could well be used in preparing class cards. We formerly used our equipment in this application, but decided that typewritten class cards were more satisfactory. The peak in our registration is reached in a very few days and there was difficulty in training a sufficient number of machine operators for such a short period. Furthermore, it was not economical nor possible to rent as many machines as we needed for the few days involved. These difficulties could probably have been overcome, but at our institution students are permitted practically unlimited latitude in changing programs during the first week of classes. No penalty, financial or otherwise, is involved. We have more than seventeen thousand students, and literally thousands of program changes occur at the beginning of each semester. In the spring semester of 1945-46, our adds, drops, and section changes averaged approximately two and one-half per student. We came to the conclusion that it was not practicable to use IBM equipment in preparing our class cards.

We do not attempt to use the equipment in connection with any phase of our registration—class assignment, section size control, etc.

This paper will deal primarily with our uses of IBM machines in relation to various phases of grade handling. Our statistical work is meshed closely with grade records and in many cases the statistical data are in a sense a byproduct.

7 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78
 INDIVIDUAL ENROLLMENT CARD
 IND 774
 LICENSED FOR USE UNDER PATENT 4,772,483
 I.B.M. 540355

CARD FORM 1

THE UNIVERSITY OF TEXAS - REGISTRAR'S OFFICE

SERIAL NUMBER	GRAD. LEVEL	COL.-SCHOOL	MODE ADM.	SEX	SURNAME	GIVEN NAMES	SCHOOL ADMITTED FROM	H.S. RANK	AGE		NATIVITY	GEOGRAPHICAL DISTRIBUTION	WORKING	RELIGION	PARENT'S OCCU-PATION	RANK	J.C. TRANS.	2ND SEM.-C.S.	ED. IN. LHM	COUNT, SEMS.	WITHDREW	SEMS. COMP.	PART TIME	FRESH ENR.	SCHOLASTIC RECORD																																																					
									YEARS	MONTHS															DEPT.	COURSE	SEM																																																			
1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58																						

CARD FORM 2

We use two basic tabulating machine cards. Card Form One is used especially in connection with grades and Card Form Two is our statistical card. We use these card forms in connection with our many needs and adapt them as other uses require. The column heads do not always indicate the data actually punched.

Operation 1: During the first week following registration a master card is punched for every student from the alphabetized file of course cards. Card Form One is used and columns 1-34 are punched. The items punched at this time are: (1) Finance Office consecutive serial number (used only for balancing student counts); (2) veteran status; (3) college or school in which registered; (4) mode of admission; (5) sex; (6) name. These cards are checked orally for accuracy.

Operation 2: After these master cards are punched, a six digit sequence or alphabet number is reproduced in each card from a pre-punched deck of one thousand serially punched cards. This number provides a rapid means of alphabetizing, and becomes a control number for matching, merging, and selecting various groups of cards on the collator. At the beginning of the session, only every fiftieth number is assigned, thus leaving space for inclusion in alphabetical order of subsequent registrations for the second semester and for the summer. This alphabet number is reproduced or ganged into all master and detail cards.

This file of master cards is then balanced with the Finance Office count number. Counts under various breakdowns, i.e. sex, college and school, mode of admission, veteran status, etc., are made about the eighth day of the semester.

At his first registration for the session, each student fills out a Statistical Data Card. This card furnishes us a basis for the personnel data we need. Coding of this data is begun promptly and is completed in some eight or ten weeks.

Operation 3: Approximately two months after the opening of the session we prepare a Master Statistical Card (Card Form Two) for each student, reproducing in it all of the data previously punched in the Master Card referred to in Operation 1. The personnel data from the Statistical Data Card are then key punched in the Master Statistical Cards. Columns 35-55 are punched. The data are then available for manipulation.

The key punching in these two cards, together with the preparation

of address cards, represents substantially all of the original key punching we do. Practically all other cards are reproduced or gang punched. This eliminates much checking and helps to avoid errors.

Operation 4: About the middle of the semester the Chairman of each teaching department sends to our office a report showing the number of students in each course and section. On the basis of this data and information from our Final Announcement of Courses, a master course card (on Card Form One, columns 36-48) is prepared for each course and section scheduled for the semester. In each card we punch: (1) a department code number; (2) department abbreviation; (3) course number; (4) section number; (5) semester hour value of courses; (6) course rank.

Operation 5: From these master course cards we prepare individual grade cards, gang punching the appropriate quantity for each section as indicated on the departmental chairman's report.

Operation 6: These cards are placed in files, with guides for the various courses and sections. Some eight weeks before the end of the semester a staff of clerks pulls for each student a set of cards corresponding to the courses and sections for which such student is registered. This information is obtained from the admission permits or course cards, which are passed down a series of tables, each clerk pulling the appropriate grade cards from the files in front of her. The individual grade cards are then checked for accuracy in pulling, and notations of dropped courses and withdrawals are punched into the grade cards concerned.

Operation 7: Next the permit or course card which has accompanied each student's pack of grade cards is removed, and the corresponding master card (from Operation 1) is inserted as the first card in each set. The file of cards is then sent to the reproducing machine and the student's name, alphabet number, veteran status, college or school, sex, mode of admission, etc., is interspersed gang punched. The master card is then sorted out and the grade cards are interpreted. Since the file of course cards was in alphabetical order, the grade cards are in that order, and are so left for further procedures. Adds, drops, section changes, withdrawals, etc., occurring later must be punched in the appropriate grade cards.

Operation 8: Shortly before the close of the semester the grade cards are sorted by course and section. Course header cards are prepared by reproducing from the master course card (from Operation

4) and a grade sheet is prepared on the alphabet printer for each section. The grade sheet shows the course and section, semester and session, and the names of all the students registered in the course. Drops and withdrawals are shown with dates. A consecutive sequence number is reproduced in the header cards and is printed on the grade sheet. This number is used to facilitate checking and filing grade sheets.

Operation 9: The grade sheets are sent to the faculty just before final examinations. The grade cards are kept in our office. After the grade sheets are prepared, the arrangement of the grade cards is not disturbed, but they are kept in exactly the same order in which they appear on the instructor's grade sheet. The instructor enters grades and absences for the semester on the sheet, signs it, and returns it to the Registrar's Office. He is encouraged to report each set of grades as rapidly as he completes the grading.

Operation 10: When the grade sheets are returned to us, clerks sort the grade cards according to the grades on the sheet. Names are not involved in this sorting and are not checked. The clerks know that the cards are in exactly the same order in which the names appear on the grade sheets, and they simply toss the cards into sorting boxes by grades. Since no matching of names is involved, this can be done very rapidly.

Operation 11: After the grade cards are sorted by grades, the cards are gang punched with appropriate grades—columns 49-50.

Operation 12: As the grade sheets are being received and after the grades are gang punched, we sort on the first digit of the alphabet number, and by the time the last grade sheet is in, we are ready to complete the alphabet sorting. In order to speed up our work, we first alphabet completely the grade cards for the first several hundred students.

Operation 13: Then we collate the address cards for this small group with the grade cards for the same group. This same procedure is used for the remaining cards. Address cards are prepared in advance. In general, three cards are used for the address. (Card Form 1—columns 1-34.) The parents' name is punched in the first, street address in the second, and city or town in the third card. All carry the alphabet identifying number.

Operation 14: The merged group of cards then is sent to the alphabet printer, and we begin the preparation of semester reports for

parents and students. This plan enables us to operate the sorter, collator, and printer simultaneously. The semester report form is prepared in duplicate, the original being sent to parents in window envelopes, and the duplicate being held in our office for the student to pick up. Continuous forms are used.

At the end of the semester we have a number of pending requests for transcripts, for transfer from one division to another, etc. We take the information from the duplicate reports for these needs before the reports are given to the students. The mailing of grade reports to parents is completed approximately a week after examinations are concluded.

Operation 15: By the time the alphabetizing of the grade cards has been completed on the sorter, enough of the cards have gone through the printer to enable us to start sorting out the parent's address cards.

Operation 16: Then as soon as the last of the reports to parents have cleared the printer, we begin the listing of grade reports for the various deans. First, we prepare in triplicate on continuous forms and in alphabetical order, a list of all students, showing courses, grades, and total hours for each student. One copy goes to the Dean of Student Life, one copy to the Dean of the College of Arts and Sciences, whose students comprise the largest group, and the third copy is retained for use in the Registrar's Office.

As the cards come from the printer, they are sorted by college and school, and a similar list is prepared for the deans of the other seven colleges and schools.

Procedure for posting grades on permanent records cards through the use of a transfer posting machine:

During the first few weeks following the close of the semester, instructors report their corrections of grades, supply missing grades, etc. These corrections are made on our copy of the listing of grades mentioned in Operation 16.

Operation 17: During the semester a master course title card has been punched for each course given that semester. (Card Form One—Columns 10-34 and 36-53). Each card contains (1) the course title or a condensation of it (not more than twenty-five letters); (2) department code number; (3) department abbreviation; (4) course number; (5) credit value; (6) number of didactic hours per week; and (7) number of laboratory hours per week.

Operation 18: The following items from the file of detail grade

cards (Operation 7) are reproduced in another set of cards (Card Form One): (1) college or school in which the student is registered; (2) mode of admission; (3) sex; (4) veteran status; (5) department code and abbreviation; (6) course number; (7) grade; and (8) alphabet number.

Operation 19: This file is then sorted by course number, and merged with the master course title cards.

Operation 20: The course title and other data on each master title card (Operation 17) not already in the file of detail (Operation 18) cards is then interspersed gang punched in the detail cards for that course. The result is a card for each course each student is taking, showing course title, grade, alphabet identifying number, etc.

Operation 21: Two additional cards for each student are added to this large file of individual course cards (Operation 20) and this entire file of cards is then sorted in alphabetical order. The additional cards are (1) a card carrying the student's name and alphabet number; (2) a card indicating the semester and session involved, and the college or school in which the student is registered. This card also carries the student's alphabet number. In the sorting of these cards, they are so arranged that the name card is first, the semester and session card is second, and the detail course cards follow in course sequence.

Operation 22: A list, carbonized on the back for transfer posting, is prepared on the alphabet printer, from this file of cards. This list of names, courses, grades, etc., is then ready to be posted to the permanent record cards through the use of the transfer posting machine.

In posting on the transfer posting machine, the permanent record cards are fed in manually, and each line on the course list (Operation 22) is posted automatically by tripping a lever. Each lever action makes a new line on the permanent record card, and posts all of the detail from the course list—course and number, title, number of lecture and laboratory hours per week, grade, and credit value.

We find it advantageous to use the transfer posting machine rather than to post with the alphabet printer because our printer is then available for other work. The rental on the transfer posting machine is relatively nominal.

We use an 8½" x 11" size permanent record card and before posting, the file of these cards is arranged in the same order as the

names appear on the course list (Operation 22). In posting with the transfer posting machine the student's name on the course list is used as an identifying check against the name on the permanent record card. The name is not posted.

We kept a careful count when we posted grades for the first semester of 1946-47. We posted an average of 7200 entries per day and an average of 1200 permanent record cards per day. The posting was done by an inexperienced operator who had no previous experience with IBM equipment.

Our enrollment in the first semester of 1946-47 was slightly more than 17,000. The IBM equipment we use consists of two alphabet duplicating punches, two sorters, a reproducer, an interpreter, a transfer posting machine and an alphabet printer. We have access to a collator in our Finance Office.

The staff used in connection with our IBM machines consists of a statistician, and four full time assistants. Additional staff is employed on a temporary basis to assist with pulling the enrollment cards.

Our use of tabulating machines in grade handling has been most satisfactory to us. In fact, with our large increase in enrollment, we would be considerably handicapped without such equipment.

Medical Education Past and Present

GEORGE MOON

TO UNDERSTAND present-day medical education, and probable future changes, some idea of the history underlying current practices is essential. The treatment of disease, the care of injuries, the ingenious practices designed to preserve the race under most difficult conditions constitute an important part of the recorded and unrecorded history of every people. The early tribes usually relied on a priest who was also the medicine-man and who strove by various devices to cast out the devils which seemed bent on destroying the individual. Medicine became a blend of superstition, observation, and faith. No doubt most cures were made in spite of the treatment rather than as a result of it—but that statement is not totally untenable today.

Medical education may be said to be as old as medicine itself. In considering the education of doctors and other members of the medical group in the United States, one finds that, as in most other professions, the methods here are indirectly derived from those developed in western Europe; although to a considerable degree our training program is the result of the conditions that existed in America during the seventeenth, eighteenth, and nineteenth centuries.

Medieval medicine was like other medieval learning: starting from a metaphysical supposition—an idea or notion expounded by some early philosopher—it theorized without experience or experiment. The medieval university limited its medical instruction entirely to theoretical exposition, and until less than 100 years ago, confined its teaching to the Latin language. Neither professors nor students defiled themselves by touching the cadaver when one was used. The first real laboratory courses in Germany in anatomy, physiology, pharmacology, pathology, date from 1814 to 1856.

The great strides made by German medicine late in the nineteenth century were clearly the result of a fortunate combination of factors within the universities which had grown up there. The teaching and the study of medicine were considered from a very early period to be the province of the universities, and university control resulted in progress and in disciplines never reached in other sections of Europe.

Near the time of the establishment of the aforementioned laboratory programs, classes in certain fields of clinical medicine also appeared. At first these were often impractical and pedantic—largely lectures based on inadequate and inaccurate information. The university spirit along with its control and support, however, eventually led to the outstanding developments that by 1900 had made Germany the greatest post-graduate training ground for physicians in the world.

In England as well as in France, the medieval profession evolved outside the university and around the physician in practice and in the hospital. In very early times in Britain, medicine seems to have been a hereditary occupation, the father passing the training to his son. The physician usually was attached to the chief of the clan or tribe, perhaps in the beginning as a serf, but the records indicate he was ordinarily held in high esteem. One custom which has not endured but which seems strangely attractive to many people of today was, that for failure to cure a patient, the physician was often fined and, if the patient died under his hands, he might be executed.

The first important recorded development in medical education in London seems to have been within the Guild of Barbers. This was a closed-shop system, with membership secured only through apprenticeship or by a large financial payment. The apprentice had to serve seven years and be recommended by his master. A doctor was limited to four such students. This company or guild had complete power in the licensing and control both of physicians and surgeons. Shortly after 1500 a similar society called "College of Physicians" was organized in London. They and the Barbers, or Surgeons, united in 1540. In order to practice in London, a man had to be a member of one of these guilds or societies. It was not until 1745 that the two professions of barbering and surgery were definitely separated. A parallel development in England was the Society of Apothecaries. This was started to supply drugs for the doctors, but soon the members were practicing medicine, prescribing as well as compounding the prescriptions. They also educated by means of an apprentice system. Between 1600 and 1700 lectures and demonstrations for the medical apprentices were arranged and a limited amount of dissection or demonstration on human materials was carried on. About this time the master surgeons began taking their apprentices into the hospital wards to learn bandaging, to treat wounds, and to reduce fractures and dislocations, and the movement spread rapidly. The best medical

schools of today, in England and in America, teach much of their practical medicine by the method of taking their students into their hospital wards.

In America, in early colonial days we find that all physicians had migrated from Europe. The early colonial doctor was usually the preacher as well, and made his rounds on horseback; marrying, baptizing and caring for the physical needs of his flock at the same time. Before the Revolutionary War, medical training was on a straight apprentice basis—the would-be doctor simply attached himself to the physician of his choice, serving in every capacity called for. He would start by cleaning out the office and taking care of the doctor's stable. By accompanying the doctor on calls and serving as receptionist, office nurse and orderly, he learned to handle many of the simple office problems. There were few hospitals and little teaching in them. It is important to remember that neither in England nor in this country was there any general medical practice act; apparently any individual who wished to do so could hang out a shingle and start to practice medicine. The first medical practice act on record seems to have been in New York state in 1766. Here a board of three men was appointed to determine the qualifications of candidates. The basic principles of this act were subsequently adopted in every state in the union.

Organized medical education in the United States seems to have started in Philadelphia around 1750 through programs of lectures which developed into an actual school in 1765, a school which eventually united with the University of Pennsylvania. A number of other universities, including Harvard, Dartmouth, Yale, and Columbia organized medical schools. Unfortunately for all concerned, a private proprietary medical school was started shortly after 1800 in Baltimore and this soon became the model for many others. In about 100 years time, 457 medical schools opened their doors. Profits apparently were large and the schools were often mere business enterprises rather than educational institutions. To begin a school all that was needed was a nucleus of teachers—given a half-a-dozen practicing physicians in a community and there was soon a school. Admission requirements were covered by the ability to pay the fees or sign a note for them. A lecture hall could be rented, there were no laboratories, and occasional demonstration dissections provided a box of bones. Hospitals and dispensaries were not considered essential

or even important. Usually two years were required for graduation but the staff generally gave a series of lectures for one year, from 16 to 24 weeks, and repeated these the following year. The student sat through the two courses of lectures, and was a doctor. That the schools made money is evidenced by the prices paid for teaching positions—there is at least one record of a professorship bringing \$3000 in such a sale. Many a school which opened in the fall would graduate a class the following spring. The man who paid his fees was practically assured of graduation and since state licensing boards were non-existent in most states, the diploma constituted the license to practice. Even the schools originally attached to large universities were affected and became similar to these new enterprises in their manner of operating.

There is a common expression that great doctors are born rather than made. A study of medical education during the last century in this country leads to the uneasy feeling that, for many years, all doctors were born rather than made, so far as being educated in medical matters was concerned.

In brief, medical education in this country had deteriorated rather than advanced, and had reached a lower point than is generally realized. I should like to quote directly and also to paraphrase briefly from a catalogue of a medical college dated in the middle 1880s: "This school has been organized in the interests of a more thorough and practical medical education than is usually furnished by similar institutions." Each candidate for admission must be eighteen years of age, of good moral character and must "pass such an examination as will show that his preliminary education and training are sufficient to profitably and properly engage in the study of medicine." Exemptions from this examination were granted to college and high school graduates, to persons holding any kind of teachers' certificates and to "those having certificates from a recognized medical society of being fitted to pursue the study of medicine." Requirements for graduation are listed as three years; one year of medical study under a physician plus "attendance upon two or more courses of lectures of twenty-four weeks each, the last of which must have been in this college." There is evidence that there was great liberality in allowing advanced standing and that one year of actual class attendance satisfied the graduation requirements in more than a few cases.

Wading through these sorry records leads one to wonder what led

the profession out of such murky depths to the present day educational standards. To the American Medical Association organized in 1847 must go all the credit. The Council on Education of the A.M.A. formed in 1904 and led by a group of conscientious, energetic, and fearless doctors took the lead. Widespread criticism of the work of the low-grade schools and consequent resentment from the schools themselves resulted in an invitation to the Carnegie Foundation to make a thoroughgoing survey of medical education. This study was undertaken in 1908 by Abraham Flexner and his report, published in 1910, marked the beginning of the modern era in medical education and the end of the dark ages. The report received wide publicity and brought such strong public reaction that it must be credited with being the prime moving factor in bringing on the great changes which followed within a few years. Many of the weaker schools closed, others united with each other or became affiliated with universities. The American Medical Association became the accepted agent for accrediting medical schools. Definite standards for admission were established. By 1914 these included fourteen units of high school work, by 1916 one year of college, and by 1918 two years of college was the accepted minimum. Definite standards for the training of teachers, for laboratories and equipment, for affiliated hospitals and dispensaries, and for libraries and endowments were enforced.

When the report was issued in 1910, 155 medical schools were operating, turning out an enormous over-supply of uneducated and very poorly trained medical practitioners. Within a few years the number of schools became stabilized at the present total of sixty-eight four-year schools, plus eight offering only the two years of basic sciences. In 1934-35 the A.M.A. undertook a second complete survey and issued a second report. While there were sound criticisms of individual schools, there was a remarkable difference since 1910. Not one of the approved schools was removed from the accepted list.

The Flexner Report resulted in various studies and recommendations as to the composition of the curriculum. The medical schools followed these so well that the curriculum became highly standardized. A student can transfer at the end of his second year in medical school with little difficulty from almost any school to almost any other. The present-day curriculum is split sharply into two parts of two years each. The first two years are the so-called basic sciences,

with long hours spent in the various laboratories and with little or no direct mention of patients and disease. The last two years are called clinical, and are spent largely out of the laboratory and in the hospitals in the dispensaries, the wards, and the clinics. In certain schools there is a growing tendency to break down this sharp division and develop a better correlation between the basic laboratory studies and their practical application to the needs of the patient.

The average medical student spends about half his two years of pre-clinical time in the study of anatomy and pathology. The remainder of his hours are divided fairly equally among the four fields of biological chemistry, physiology, bacteriology and pharmacology. Many medical schools give in the second year a number of introductory textbook courses intended to introduce the student to his clinical studies. They also teach him the usual procedures in making a physical examination. In the third year, the average college literally throws the book, or specifically, some fifteen books, on clinical medicine at the student. He is expected to study and master huge textbooks in Anesthesia, Psychiatry, Dermatology, Obstetrics, Therapeutics, Otolaryngology, Internal Medicine, Tropical Medicine, Neurology, Ophthalmology, Orthopedics, Pediatrics, Radiology, Surgery and Urology. During this third year at Illinois, there is formal class work daily from eight to nine in the morning, and from four to six in the afternoon, six days per week. Intervening hours from 9 to four are spent in contact with patients or in laboratories. The fourth year is a continuation of the third with more emphasis on the treatment and care of patients and less on the textbook. While senior students are scheduled from eight to six daily, they are subject to call for special hospital duties at any hour of the twenty-four. The medical student of today may not have an ideal curriculum but his education has come a long, long way in the last fifty years—the student certainly puts in a lot of effort, with many long hours of study, recitation, and actual labor, and has many difficult hurdles to pass.

Admission requirements are almost as standardized as the curriculum. A few schools still admit on two years of college work, but the common requirement is three years. Courses ordinarily required include one year of physics, two years of chemistry and one of zoology, as well as English and a modern language. There are approximately twice as many applicants each year as there are students enrolled in beginning classes. This surplus of applicants who have completed

the minimum requirements makes possible various selective procedures and generally results in a good quality of student, thereby keeping the rate of failures relatively low.

Medical students, when they receive their diplomas after four years of study, are not qualified to practice medicine. Practically all of them serve as internes for one or more years in good hospitals and it is in the internship, and residencies, that good medical practice is learned. The four-year medical course is properly all basic and preliminary and might well be grouped with the pre-medical educational program. Most medical students never touch a patient with a surgeon's knife, that being entirely reserved for the interne year and later training.

For most present-day medical students, the internship is not the end but rather the beginning of their true medical education. Few of our present students expect to become general practitioners; most of them aim toward some form of specialization—and specialization means from three to five years of added hospital training and study. We may or may not have socialized medicine in the future but the trend is toward some form of group practice with individual doctors working more and more on one particular phase of medicine. The volume of learning and the vast progress of medical science makes this almost essential. In surgery alone we find men who will operate only on one highly specific organ as the brain, the thyroid, the eye, the throat, the chest, the abdomen, or the hand. Other specialties are similarly sub-divided. In brief, the medical specialist moves forward by learning more and more about less and less.

Our present-day medical educators like to refer to the medical profession—and I mean, of course, all the medical professions—as being highly scientific. Certainly no student is encouraged in the study of medicine who does not do well in his basic science courses. Science has been defined as "the persistent effort of men to purify, extend, and organize their knowledge of the world in which they live"; and, under such a definition, medicine may qualify to be called a science, since medical men will always be working to broaden the scope of their knowledge. However, medicine can hardly ever be expected to be reduced to the terms of some materialistic or chemical formula; the doctor faced with the sick child must, no doubt, call upon those same scientific abilities as the physicist when faced with a problem in his field: namely, observation, inference, verification and generalization. Yet the best doctor, following the course of an unrecognized fever in

a sick patient, using every known laboratory test to no avail, will surely fall back upon the old empiric trial and error methods of his early predecessors. The human body is, in final essence, an exceedingly complex bundle of everything that goes to make up chemistry, physics, biology, psychology and what may be even more important, all of the other social sciences as well.

The doctor as he speaks glibly of his electrocardiograph, his ophthalmoscope, his electroencephalograph, and numerous other gadgets which are definite and important aids in the diagnosis or treatment of difficult conditions, can and does give the impression of being highly objective in his evaluation of disease. However, the student should recognize that in going into the study of one of the medical sciences he is not going into a field which can be methodically organized, catalogued, and reduced to a scientific formula.

Having traced, in a very sketchy fashion, the steps by which medical education arrived at its present stage of development, we may wonder what, if anything, this means to the individual college administrator. I think that most of you have some contact with pre-medical groups. The advice of medical school deans and faculty was recently summarized in a talk by the Dean of the School of Medicine of the University of Cincinnati as follows: "What, then, shall be the content of the pre-medical program? It must include the science necessary to the study of medicine—no more—and this science should be set in the matrix of a liberal education." Selection committees urge against the multiplication of science courses in the pre-medical years—quality of work is greatly preferred to quantity.

Remember that the good doctor is, or should be, a community leader in ethical, humanistic, social and political matters as well as taking care of the physical ills. Once a student enters medical school he has no time whatsoever for cultural training and experiences. Medical schools rely, therefore, on the liberal arts colleges to expose these students to as much as possible in the way of those non-laboratory courses usually considered cultural. Repeatedly, in my hearing, medical administrators have urged such a practice; that is, don't let the pre-medical student take more science courses than are actually required; force him, if necessary, to take his electives in the fields that he will never again study after he leaves the liberal arts college.

To summarize: Medical education has only come of age within less than fifty years. With the great discoveries and advances con-

stantly being made, the doctor's education is a life-long affair. The pre-medical and the medical years are only preparatory for the time when the student will really learn the practice of medicine. Our faculties must lay a foundation of knowledge and of habits that will not only enable the medical man to develop and to grow with the great and growing body of knowledge within the profession, but also to take his place in his community as a civic and social leader—a man who is more than a dispenser of prescriptions—one who is an example of the best efforts of a great educational system.

Problems of Personnel Service and the Veteran

J. ANTHONY HUMPHREYS

SINCE veterans of World War II have now been attending American universities and colleges in large numbers for several months, it is appropriate that at least tentative inventory of the situation be taken. Particular emphasis in this presentation is placed on personnel problems that have arisen, and will arise, due to the presence of so many veterans.

The sheer fact of greatly increased enrollments, accounted for by veterans and non-veterans, has focused attention and energies of boards of control and administrative officers on immediately recognized needs: instructional staff; classroom and laboratory space; equipment; library facilities; finances. To secure those essentials, even in barely adequate fashion, has required unusual effort and ingenuity. Although it is right and logical that these needs should have had first attention, there is danger that no provision, or inadequate provision, is being made for student personnel service.

The characteristics and attitudes of the veterans lie at the basis of personnel problems posed for solution by those responsible for student personnel work in our universities and colleges. In general, these problems are not different in kind from those existing in the usual student body. However, there are differences in intensity and preponderance of some of the situations. To understand better the personnel problems of veterans, we need to remind ourselves of some of the more outstanding characteristics and attitudes of the veterans.

First of all, the veterans are more mature in age and general outlook than are most of the non-veterans in our student bodies. This characteristic means that the veterans on the whole have greater seriousness of purpose and are better motivated toward their academic work. Their level of ambition is high. In fact, for some veterans ambition exceeds general intellectual capacity.

Next, the typical veteran wants to make rapid progress toward his educational and vocational goal. He feels very keenly that he has lost time out of his life while in the armed services,—at least so far as his formal educational advancement is concerned.

Because of this feeling of loss of time the veterans desire to take courses which contribute immediately and directly to their educational and vocational objectives. In the opinion of many veterans courses that round out their general education are unnecessary and are a further waste of time. However, a large proportion of the veterans want help in the choosing of their educational and vocational goals. They are anxious to be given tests of aptitudes and interests and to have authentic information concerning vocations and educational institutions made available to them.

Moreover, the typical veteran is under financial pressure and therefore experiences the emotional strains ordinarily associated with such pressure. Many veterans are married or feel obligated to contribute financially to the parental household. Hence a large percentage of veterans are working on a part-time basis outside their class hours. The increased cost of the essentials of living has intensified the difficulty of the veterans' financial status, which would cause strain even if costs were lower. All in all, veterans are attempting to pursue higher education at as fast a rate as possible at the same time they are earning part of their expenses. To the person who feels under other pressures and who has high ambitions, the financial load becomes most burdensome and a source of genuine worry.

Some of the veterans, who did not graduate from high school and who entered college on the basis of the tests of General Educational Development, feel keenly the added responsibility of making up for deficiencies in skills and knowledge which they should have received in regular high-school classes. For example, those who did not have enough work in mathematics for entering as full-fledged students of engineering must make up the lack in mathematics. In such a situation the pressure is intensified for some veterans. This does not make for peace of mind.

Perhaps it is safe to say that not too large a percentage of veterans now enrolled are definitely incapacitated emotionally and physically. The proportion of veterans mentally and emotionally maladjusted to a degree that makes progress in college impossible is probably not nearly so large as some of the earlier estimates would indicate. But there are enough veterans emotionally and mentally maladjusted in varying degrees, to pose problems for those who counsel students. As increasing numbers of veterans enter higher institutions under Public Law 16, the number of problems based on physical and emo-

tional incapacities will grow. Higher institutions might well consider seriously their resources for dealing successfully with the veterans who are blind, or hard of hearing, or crippled. A disservice, rather than a service, is done to the handicapped veteran if he is accepted and then not given the help which he needs and merits. Higher institutions could learn much from examination of the preparations made by industry and business to absorb the handicapped. Many industries and businesses have made elaborate analyses of the situations in relation to the incapacitated veteran.

Because of these characteristics and attitudes of the veterans many difficult problems face those staff members and instructors who have responsibilities for student personnel work and interest in the welfare of students as individuals.

First, the pressure from veterans for admission poses new problems. Institutions must again think through their fundamental bases for acceptance of students. Shall the principal criterion be quality of earlier academic achievement? Or, shall well-founded judgments of personal characteristics be important along with academic promise? What shall be the attitude toward accepting veterans who attempt to qualify for admission in part, or altogether, on the basis of the USAFI tests of General Educational Development? Because of the large number of male veterans, should a coeducational institution set higher quotas (percentages) of men to be accepted? If this is done, what will be the long-run effect of a disproportionate distribution of men and women in the student body? Then, too, many institutions are forced to reconsider their policies with reference to acceptance of out-of-state prospective students. At the roots of these, and other, problems connected with admissions is the determination of the maximum number of students who can be adequately accommodated by the institution. Such determinations should be reached by analysis of faculty personnel and equipment for the various departments or schools and for the various classes within the departments and schools.

Another insistent personnel problem set by the presence of so many veterans is the one centering around academic requirements and methods of teaching. A higher institution might well ask itself the following questions. (1) Should refresher (review) courses be offered to veterans, either for credit or not for credit? (2) Or should some instructors be given a lighter load of teaching so that tutorial assistance, in groups or individually, may be given veterans who

experience unusual difficulties in regular course work? Such special help may prove particularly necessary in English, remedial reading, mathematics, the natural sciences, accounting, engineering drawing, foreign languages. (3) Should there be modification of course prerequisites for those veterans who are working against time and who are mature enough intellectually to be released from those prerequisites which can be safely omitted? (4) Should the requirements of set curricula be modified for those veterans whose situation justifies such action? This question entails, of course, modification of requirements for graduation. The prescribed amount of credit in physical education is only one illustrative problem in this group of problems.

Because of the important needs of veterans and because of their characteristics and attitudes, each institution ought to study itself minutely and sincerely with reference to the quality and extent of its services in testing and counseling. Such action is necessary if the veterans are to profit to the maximum. But there is grave danger that the pressure of numbers of veterans and lack of professionally trained personnel workers in our higher institutions will prevent the rendering of desirable testing and counseling services.

Techniques and knowledge in every aspect of testing and counseling merit careful review in the light of the needs of veterans. The educational, vocational and personal problems of the veteran demand the best of which we are capable, both before the veteran has actually enrolled and during his period of residence. Each institution should set up its methods of testing general and specific aptitudes and abilities. Available, reliable standardized tests ought to be used to find out the individual veteran's strong and weak points. Then let the results be used in placing the veteran in courses and not just filed away as so much data. Moreover, there is need for improvement of interviewing techniques to fit different kinds of situations. Our programs of counseling ought to include systematic follow-up of academic progress or lack of progress. Careless counseling or lack of counseling altogether may cause significant loss of time to the veteran, who can ill afford to lose time.

Much as vocational guidance is frowned upon in some quarters, it must not be forgotten that it is inseparable from true educational guidance and that the veteran takes a most practical attitude toward his life. He wants to make every course count toward reaching his occupational goal. Therefore, counselors ought to be up-to-date in

their grasp of occupational information and in their knowledge of educational requirements. Then too, authentic data concerning supply and demand for new workers in various fields are of practical importance to veterans. For example, thousands of men are planning to enter engineering. There is a danger that within the not too distant future very many more men will be available than can be employed. Those veterans who are not genuinely able to profit by training for engineering should have the facts brought to their attention. Entailed also is the need of greater skill in the use of good tests and inventories appropriate to vocational counseling. Nor can the availability of up-to-date vocational information in our libraries be overlooked. Both counselors and students must make more frequent use of these materials. Even such a common thing as a collection of current college and university catalogues has proved to be a very popular item.

In the area of personal counseling the counselor is tapped for every bit of ingenuity, knowledge, and skill of which he is capable. There is a heavy drain on the counselor to help resolve problems involving family difficulties, housing, financial troubles, mental and emotional maladjustments. Wherever possible, the counselor ought to refer the veteran to someone else if the counselor is not expert in the situation with which he is confronted. It is a mistake for a counselor to attempt to be all things to all men. Counselors ought to be aware of their own limitations and know to which colleague or outside agency the veteran should be referred. Particularly, care must be taken to act as counselor of mentally and emotionally maladjusted veterans only if the counselor is thoroughly competent. In this aspect of personal counseling it cannot be emphasized too frequently that a little knowledge is a very dangerous thing.

In our counseling relationships with veterans we must be guided by the following basic considerations. First, most veterans are more mature than non-veteran students, even of the same chronological age. Therefore, the veterans must be treated as grown men and women. They react unfavorably to unnecessary regulations or rules that smack of the high-school level. They do not want to be led around by the hand or patted on the head. They resent being supervised too closely. They resent being told by the counselor exactly what to do.

Next, it must be remembered that the counseling relationship cannot be forced on the veteran. It ought to grow in a natural manner

out of situations. Of course the stage often has to be set. Nevertheless by one means or another the veteran must accept the relationship of his own accord, or counseling with him might as well be given up.

Then, too, some veterans are more ambitious than their capacities and potentialities warrant. A great deal of tact and delicacy is required to bring a veteran to see for himself that he is overreaching himself and that he needs to readjust his plans.

Finally, counseling with veterans must be positive, not negative. If a situation, without question, demands that a veteran be refused a privilege or be penalized for failure to meet academic standards, the counselor should be prepared to make positive suggestions. For example, if a student must be dropped from a class, or from the institution, the counselor ought to suggest a positive course of action that might assist the veteran in making an adjustment.

In the over-all view of student personnel service to veterans the most indispensable point is that the functions of instruction and of personnel service must be closely co-ordinated. There are indications that staff and faculty realize increasingly the interdependence of instruction and personnel service. The success of each depends on their working together. The interests of the classroom teacher can be served very directly by an actively functioning student personnel service. Personnel service cannot achieve significantly without close contact and harmonious dealings with the instructional processes. The veteran's fullest development as an individual depends on sincere co-operation of the instructional staff and of those responsible for student personnel service.

Nor can it be emphasized too frequently that an effective program of personnel service requires: (1) an abundant, qualified staff; (2) time; (3) adequate space in which to perform the work; (4) equipment; and (5) the wholehearted co-operation of the other administrative officers and of the faculty. In setting up a plan for personnel service, it must be remembered that the work is a highly specialized activity and that not any Tom, Dick, or Mary, who may not have a full-time teaching schedule, is qualified.

All in all, the skillful handling of the veteran is the most challenging and most difficult problem which has faced colleges and universities for some time. Shall the attitude of those who must attack the problem be negative, careless, routine in character or shall a positive, systematic, creative attitude be adopted?

Capitalization Disabilities of College Freshmen

WALTER SCRIBNER GUILER

NATURE OF THE STUDY

THE PURPOSE of this article is to report the results of the last in a series of analytical studies of English-usage disabilities of college Freshmen.¹ The written work of the students on the capitalization phase of the Guiler-Campbell *Analytical Survey Test in English Fundamentals*² constituted the data on which the study was based. The Freshmen included in the study were those who entered Miami University in the fall of 1939. This group was selected in order that the test performance of the students would be representative of that of college Freshmen in the years before college enrollments became affected by World War II. Of the 1,267 Freshmen included in the study, 479 were enrolled in the College of Arts and Science; 360, in the School of Business Administration; 363, in the School of Education; and 65, in the School of Fine Arts. Of these students, 751 were boys, and 516 were girls. The procedure employed in the study consisted of a detailed analysis of the students' written work, as revealed by their test papers.

NATURE OF THE TEST

The capitalization phase of the Analytical Survey Test is reproduced below in order to acquaint the reader with the test content and with the test procedure that was employed. It should be noted that the examinee is directed to underline each letter in the test items which should be capitalized.

Directions:—Underline each letter which should be capitalized in the following sentences. Study the sample before you begin.

¹ The study dealing with disabilities of college Freshmen in sentence structure was reported in the October, 1946, number of the *School Review*; the studies dealing with disabilities of college Freshmen in grammatical usage and in punctuation were reported in the October, 1946, and the January, 1947, numbers of the *Journal of the American Association of Collegiate Registrars*.

² Published by the Hill-Brown Printing Company, Hamilton, Ohio.

SAMPLE: they knew that i lived in chicago.

1. The building is located at 110 west fourth street, pittsburgh, pennsylvania.
2. The dardanelles, a strait between europe and asiatic turkey, was once called the hellespont.
3. The free public lands of the west are being settled rapidly; those of the east were settled long ago.
4. Young Talbot was now free to write, ph. d., d. d., and ll. d., after his name.
5. "Is life so dear, or peace so sweet," asked patrick henry in his famous speech, *liberty or death*, "as to be purchased at the price of chains and slavery?"
6. The english scholar was not enthusiastic about american jazz.
7. The peasant revolt occurred in England in 1381.
8. The taxpayers were addressed by representatives of the chamber of commerce and of the kiwanis club.
9. We wrote a theme in which we imagined ourselves guests in Plymouth on the first thanksgiving day.
10. Whenever beauty turned and beckoned, we followed.
11. The oriental financier went about his business in a leisurely manner.
12. The old man was a picturesque survivor of the early west.
13. The commerce club of Dayton entertained the business and professional women's club.
14. Jane was ill in the winter, but she recovered when spring came.
15. To all other flowers I prefer the daffodils of early spring and the asters of late autumn.
16. The weather grew colder as we traveled northward; great clouds rose in the west.
17. In hamlet, town, and city hunger walked unashamed in the streets.
18. The question for debate follows: *resolved*, that world peace is possible.
19. After the baptist church burned down, the congregation held meetings in a building loaned them by the democrats.

20. "We may be entering," said the speaker, "upon a period which history will label the second dark ages."

Score = number of
sentences right
Possible score = 20 points

RESULTS

The findings of the analytical study are reported in the series of tables which follow. The results are expressed in terms of (a) mean scores, (b) percentage of students exhibiting weakness in ability to capitalize the various test items, (c) percentage of students who over-capitalized the various test items, (d) percentage of students who capitalized words which should begin with small letters, and (e) error quotients for specific capitalization usages.

Mean Scores. The mean scores of the college Freshmen on the capitalization phase of the Analytical Survey Test are recorded in Table 1. The complete tabulation of the scores revealed a number of

TABLE 1
MEAN SCORE OF 1267 COLLEGE FRESHMEN ON THE CAPITALIZATION
PHASE OF THE ANALYTICAL SURVEY TEST

	College of Arts and Science			School of Business Administration			School of Education			School of Fine Arts			All Four Schools		
	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T*
Number of students	307	172	479	291	69	360	114	249	363	39	26	65	751	516	1267
Mean score	9.6	12.0	10.5	8.8	11.8	9.4	9.0	11.2	10.5	9.8	10.5	10.1	9.2	11.5	10.2

* The letters in the column headings have the following connotations: M—men, W—women, T—totals.

important facts. One fact was that while some of the students manifested marked proficiency in ability to capitalize, a large proportion exhibited marked incompetency. The mean score of all the students was only 10.2 out of a possible score of 20. Comparison of the individual test scores with the test norms showed that more than one-half of the students were below the norm for Grade XII, that more than two-fifths were below the norm for Grade XI, and that more than one-third were below the norm for Grade X. A second fact was that there were significant sex differences in capitalization ability, the girls having attained a mean score of 11.5, and the boys

a mean score of 9.2. Sex differences were most pronounced among Freshmen in the School of Business Administration and least pronounced among those in the School of Fine Arts. Another fact was that there was some variation in the average achievement of the Freshmen in the different schools. The highest mean score was

TABLE 2
PERCENTAGE OF COLLEGE FRESHMEN EXHIBITING WEAKNESS IN
ABILITY TO CAPITALIZE THE VARIOUS TEST ITEMS

Number of Test Item	College of Arts and Science	School of Business Administration	School of Education	School of Fine Arts	All Four Schools
	479	360	363	65	1267*
1	33.2	38.6	25.1	41.5	32.8
2	25.5	29.7	21.5	24.6	25.5
3	30.5	39.7	37.2	29.2	35.0
4	80.4	81.4	73.3	83.1	78.8
5	27.8	31.7	29.8	32.3	29.7
6	26.5	33.3	23.7	29.2	27.8
7	50.5	55.6	51.5	56.9	52.6
8	46.6	47.8	42.1	50.8	45.9
9	42.6	50.6	44.6	49.2	45.8
10	57.0	71.7	62.3	63.1	63.0
11	58.7	63.9	60.1	52.3	60.2
12	38.8	48.6	50.1	40.0	44.9
13	42.6	51.7	47.9	44.6	46.8
14	30.1	24.7	21.5	32.3	26.2
15	46.1	48.9	35.0	46.2	43.7
16	43.8	42.2	38.8	41.5	41.8
17	78.1	88.1	79.9	76.9	81.4
18	92.8	95.0	93.1	95.4	93.6
19	40.3	48.1	44.6	36.9	43.6
20	65.1	71.7	64.5	66.2	66.9
Mean	47.8	53.1	47.3	49.6	49.3

* The numbers in the column headings indicate the number of college freshmen who took the test.

attained by students in the College of Arts and Science and in the School of Education, and the lowest mean score by those in the School of Business Administration. A fourth fact (not shown in the table) was that marked differences characterized the attainments of individual students, the scores having varied from 1 to 19. The greatest variation occurred among the girls in the School of Education, and the least variation among the girls in the School of Fine Arts.

Difficulty with Test Items. The extent to which the college Freshmen encountered difficulty in capitalizing the various test items is shown in Table 2. Reference to the top horizontal row will show how the table should be read. Thus, 33.2 per cent of the students in the College of Arts and Science, 38.6 per cent of those in the School of Business Administration, 25.1 per cent of those in the School of Education, 41.5 per cent of those in the School of Fine Arts, and 32.8 per cent of those in all four schools made errors in capitalizing the first test item.

The major fact revealed by Table 2 is that a significant proportion of the college Freshmen made errors in capitalizing all of the test

TABLE 3
PERCENTAGE OF COLLEGE FRESHMEN WHO OVER-CAPITALIZED
THE VARIOUS TEST ITEMS

Number of Item	Percentage	(Continued)	
		Number of Item	Percentage
1	0.0	11	8.0
2	4.3	12	5.2
3	5.8	13	2.2
4	37.7	14	25.8
5	16.4	15	43.8
6	11.1	16	42.1
7	0.0	17	29.0
8	6.6	18	30.8
9	7.0	19	4.0
10	1.3	20	26.0

items. When the total group of students is considered, it is found that not a single one of the twenty items was missed by fewer than one-fourth of the students. One-third or more of the students were unable to cope with fifteen items; one-half or more, with seven items; two-thirds or more, with four items; and three-fourths or more with three items. A second fact is that there was marked variation in the extent of difficulty caused by the different test items. Thus, while slightly more than one-fourth of the students encountered difficulty with items 2, 5, 6, and 14, more than three-fourths experienced difficulty with items 4, 17, and 18. A third fact is that there was some variation from school to school in the mean percentage of students who manifested disability in capitalizing the test items. In the case of some of the individual items, disability differences among the Freshmen in the four schools were quite marked.

Extent of Excess Capitalization. Data showing the extent to which the college Freshmen used capital letters excessively in the various test items are recorded in Table 3. The main fact revealed by the table is that a significant proportion of the students over-capitalized

TABLE 4
PERCENTAGE OF COLLEGE FRESHMEN WHO CAPITALIZED WORDS
WHICH SHOULD NOT HAVE BEEN CAPITALIZED

Words Which Were Capitalized	Test Items in Which the Words Appear	Percentage Capitalizing the Words
free public lands	3	3.0
early	12	3.6
life	5	3.8
scholar	6	3.8
congregation	10	4.0
representatives	8	4.3
peace	5	4.4
first	9	4.9
as	5	5.8
city	17	5.9
the*	20	6.2
town	17	6.6
history	20	7.6
financier	11	8.0
jazz	6	9.2
is	18	9.9
upon	20	11.2
northward	16	16.2
winter	14	18.1
autumn	15	20.6
spring	14 and 15	22.5
possible	18	25.7
asters	15	26.7
daffodils	15	27.8
hamlet	17	28.3
world peace	18	29.4
west	16	38.0
Ph.D.**	4	56.5

* Capitalized the second "the" in the test item.

** Capitalized the "h" in Ph.D.

many of the test items. Excess capitals were used by 10 per cent or more of the students in nine of the twenty items, by 20 per cent or more in seven items, by 30 per cent or more in four items, and by 40 per cent or more in two items. Another fact is that there were significant differences in the extent to which the various test items were over-capitalized, the percentages having ranged from 0.0 for items 1 and 7 to 43.8 for item 15.

Nature of Excess Capitalization. The words in the test items which should begin with small letters, but which were capitalized with greatest frequency by the college Freshmen, are presented in Table 4. The main fact revealed by the table is that a considerable number

TABLE 5
ERROR QUOTIENTS OF COLLEGE FRESHMEN FOR THE SPECIFIC USAGES INVOLVED IN THE CAPITALIZATION PHASE OF THE ANALYTICAL SURVEY TEST

Specific Capitalization Usages*	Test Items to Which the Usages Apply	Error Quotient
Use of capital letters for—		
1. Names of persons	5	.011
3. Names of countries, states, cities, streets, or any words designating particular locations or parts of the world	1 and 2	.070
4. First and important words in a title	5	.196
6. Words derived from the names of countries or sections of the world	2, 6 and 11	.223
7. Names of organizations	8, 13 and 19	.264
10. Names of sections of country or parts of the world	3 and 12	.325
11. Abbreviations of degrees following a name	4	.326
12. Words derived from the names of groups of persons and organizations	19	.384
13. Names of days of special observance	9	.418
14. Names of notable historical events	7	.529
15. Names of notable historical periods	20	.538
17. Abstract words strongly personified	10 and 17	.718
18. "Resolved" and the first word following it in the title of a debate	18	.810
Use of small letters for—		
2. First word of the second part of a direct quotation unless the first word begins a new sentence	5 and 20	.058
5. Names of the seasons	14 and 15	.207
8. Points of the compass	16	.271
9. Names of flowers	15	.273
16. The letter "h" in Ph.D.	4	.565

* The specific usages are listed according to the size of the corresponding error quotients.

of the students included in the study entered college without having learned many of the more common canons of capitalization usage which presumably had been mastered in the elementary school. Lacking guiding principles, the students seemed to have felt constrained to rely on hunches as to what constitutes right and wrong usage. This seeming tendency to rely on hunches is illustrated well in item 16. Although the item includes two applications of the usage which requires that points of the compass begin with a small letter,

the percentage of the students who capitalized *west* was more than double the percentage of those who capitalized *northward*.

Error Quotients for Specific Usages. Data bearing on the inability of the college Freshmen to deal with the specific capitalization usages involved in the various test items are recorded in Table 5. The usage weaknesses are expressed in terms of error quotients, which are "determined by using the frequencies of error for an individual or a group as the numerator of a fraction in which the denominator shall represent chances for error."³ The fact that the error quotient considers frequency of mistakes in relation to the number of opportunities to make mistakes makes it a much more valid and significant measure of the prevalence of disability than does a mere count of disabilities. Reference to the top number in the right-hand column of Table 5 will serve to show how the error quotients were computed. Thus, 14 of the 1,267 students displayed weakness in capitalizing the names of persons. Since this particular usage is involved in only one of the test items (item 5), there were 1,267 chances ($1,267 \times 1$) for the students to display weakness in the ability in question; hence, the error quotient is .011 ($14 \div 1267$).

The chief fact revealed by Table 5 is that most of the usages listed in the table involved error hazards for a significant proportion of the students. The error quotient was below .100 for only three of the eighteen usages. It was above .200 for fourteen usages, above .300 for nine usages, above .400 for six usages, and above .500 for five usages. A second fact is that disability was much more prevalent in some usages than in others, the error quotients having varied from .011 to .810. A third fact (not shown in the table) is that there were marked differences in the extent of disability manifested by the students in applying the same principle of usage in like situations in the same test item. Thus, item 8 affords two opportunities to apply Usage 7. The error quotient for the usage, as applied to *Kiwanis Club*, is practically double (.354 as compared with .182) that for the same usage, as applied to *Chamber of Commerce*. A fourth fact (not shown in the table) is that marked differences characterized the extent of disability exhibited by the students in applying the same principle of usage in different test items. Usage 6, for example, is involved in three test items. The four words to which

³ Martin J. Stormzand and M. V. O'Shea. *How Much English Grammar?* Warwick & York, Inc., 1924, p. 14.

the usage applies are *Asiatic* in item 2, *English* and *American* in item 6, and *Oriental* in item 11. The corresponding error quotients for Usage 6, as applied to the four words in the order given, are .122, .137, .096, and .535.

REMEDIAL PROCEDURES

The analytical findings that have been presented bring to light a condition of learning that is quite disappointing. That much can be done to improve the situation is attested by the results yielded by a number of remedial projects in which instruction and practice were focused on individual learning needs. One of the projects was carried on with sixth-grade pupils.⁴ The 19 pupils having the lowest capitalization scores in the group of 34 pupils were provided with individualized remedial instruction. Comparison of the scores of the 19 remedial pupils on initial and final tests⁵ showed that marked improvement had been made. The mean score on the final test was 62 per cent higher than on the initial test.⁶ The mean error quotient was reduced from .372 on the initial test to .090 on the final test. The mean number of usages in which errors were made was reduced from 21 on the initial test to 8 on the final test.

Another of the remedial projects was conducted with college Freshmen.⁷ The 134 students having the lowest capitalization scores in a group of 350 college entrants were given remedial instruction in which the work was geared to individual needs. The mean score of the remedial students on the final test was 83 per cent higher than on the initial test. The mean error quotient was reduced from .194 on the initial test to .024 on the final test. The mean number of usages in which errors were made was reduced from 15 on the initial test to 3 on the final test.

The plan of procedure that was used in the administration of the remedial projects consisted of the following steps: (a) discovering the weak students, (b) diagnosing the learning difficulties of the

⁴Walter S. Guiler, "Improving Ability in Capitalization," *Elementary School Journal*, XXXI (November, 1930), 216-22.

⁵Walter S. Guiler and Ralph L. Henry, *Diagnostic Tests in Capitalization*. Boston: Ginn and Company.

⁶The percentage gain was computed on the basis of actual gain in relation to possible gain.

⁷Walter S. Guiler, "Remediation of College Freshmen in Capitalization," *Educational Method*, XI (June, 1932), 540-44.

weak students, and (c) providing a program of instruction and practice geared to the particular learning needs of individual students. Merely knowing who the weak students are will not suffice. Nor will it be sufficient just to be aware of the students' learning difficulties. This information, important as it is, is of value only in giving direction to the instructional and practice needs of the students concerned. Teachers would do well to employ some of the techniques of good medical practice; the good physician does not stop with diagnosis but proceeds to therapy.

SUMMARY AND CONCLUSION

The following statements are supported by the data that have been presented and are made by way of summary and conclusion.

1. Ability to capitalize is a composite of ability to use capital letters in a wide variety of situations. For this reason, different learners may be expected to encounter difficulty in the application of different usages.

2. Some of the college Freshmen included in the study manifested marked proficiency in capitalization; others exhibited marked incompetency. More than one-half of the students were below the norm for Grade XII; more than two-fifths were below the norm for Grade XI; and more than one-third were below the norm for Grade X.

3. The Freshmen varied greatly in their mastery of the field of capitalization and in their mastery of specific usages. Out of a possible score of 20 on the capitalization phase of the Analytical Survey Test, individual scores ranged from 1 to 19.

4. The Freshmen manifested marked individuality in the types of difficulties which were encountered. This fact indicates a distinct need for individualized remedial instruction.

5. Comparatively few of the capitalization usages accounted for most of the difficulties which the students encountered. In fact, five usages caused more difficulty than all the other thirteen. It goes without saying that the more difficult usages should receive major emphasis in a follow-up course of instruction.

6. A large proportion of the Freshmen evidenced a marked tendency to over-capitalize the test items. More than 10 per cent used excess capitals in nine of the twenty items; more than 20 per cent, in seven items; more than 30 per cent, in four items; and more than 40 per cent, in two items.

7. Experimental evidence shows that marked improvement in capitalization ability may be expected from a systematic remedial program that first discovers usages in which particular learners are weak and then provides self-teaching and practice materials definitely suited to individual needs.

8. As long as society continues to hold its members accountable for the observance of the conventional canons of capitalization usage, secondary schools should assume responsibility for effective training in this area of learning.

9. Institutions of higher learning which accept from secondary schools students who manifest disability in capitalization usage should feel obligated to institute a program of instruction whereby the students concerned may not only have the opportunity but also should feel constrained to overcome their handicaps.

Changes in Semester Hour and Subject Matter Requirements for the Bachelor's Degree in Liberal Arts Colleges 1890-1940

ORVIN T. RICHARDSON

THE DATA herein presented have been secured from the college catalogues of 105 liberal arts colleges, at five-year intervals from 1890 to 1940. Fifty-nine of the institutions are located in the area served by the North Central Association of Colleges and Universities; 21 in the area served by the Association of Colleges and Schools of the Middle States and Maryland; 14 in the area served by the Association of Colleges and Secondary Schools of the Southern States; and 11 in the area served by the New England Association of Colleges and Secondary Schools. Ninety of the 105 colleges had an enrollment of fewer than 1,000 students.

CHANGES IN THE TOTAL NUMBER OF SEMESTER HOURS REQUIRED FOR GRADUATION

The requirements for the two degrees, the Bachelor of Arts and the Bachelor of Science, were examined in the original study¹ but the average number of semester hours required for each of these degrees varied so little that only the data for the Bachelor of Arts degree are presented in Table 1. Under the caption "Mean" in Table 1, it will be noted that during the fifty-year period there was a reduction of approximately 10 semester hours in the total required for graduation. Under the caption "Range," the explanation for the wide variation in requirements (especially in 1900) might have been that the classes were less than an hour in length or that the laboratory periods were figured in an unusual way. Most of the colleges required 128 semester hours for graduation until 1910, at which time there was a reduction to 120; this number increased to 124 in 1925 and continued at that figure through 1940.

¹ Orvin T. Richardson, "Requirements for Graduation from Liberal Arts Colleges, 1890-1940," (Unpublished Ph.D. dissertation, Dept. of Education, University of Chicago, 1946).

SUBJECT REQUIREMENTS FOR GRADUATION

The changing philosophy of the colleges toward curriculum content is reflected in the prescription of specific courses at the different intervals. These specific requirements were diminished as the course

TABLE 1
AVERAGE NUMBER OF SEMESTER HOURS REQUIRED FOR A BACHELOR
OF ARTS DEGREE IN 105 COLLEGES FROM 1890 TO 1940

Year	Mean	Median	Range	Mode
1890	135.00	130.68	117-189	128
1895	133.00	128.60	100-189	128
1900	130.93	127.70	99-201	128
1905	129.53	126.83	111-197	120
1910	127.67	125.83	115-198	120
1915	126.67	124.78	115-168	120
1920	126.31	125.31	116-144	120
1925	126.48	125.31	120-180	124
1930	125.55	125.10	120-138	124
1935	125.38	125.00	120-136	124
1940	124.96	124.79	114-140	124

offerings expanded and the free-election system was adopted by the colleges. Full prescription of course work had been abandoned in many of the schools by 1890; however, Table 2 shows the percentage of the 105 colleges that continued to prescribe the entire

TABLE 2
PERCENTAGE OF 105 COLLEGES THAT PRESCRIBED ALL COURSE
WORK FOR THE BACHELOR OF ARTS AND BACHELOR
OF SCIENCE DEGREES FROM 1890 TO 1940

Degree	1890	1895	1900	1905	1910	1915	1920	1925	1930	1935	1940
Bachelor of Arts	30	18	9	6	0	0	0	0	0	0	1
Bachelor of Science	25	20	8	3	1	0	0	0	0	0	0

program of study for the Bachelor of Arts and the Bachelor of Science degrees after this time. No college prescribed all course work for the Bachelor of Arts after 1905, with the exception of St. John's of Annapolis which reinstated full prescription in 1940. Full course

work prescription was abolished for the Bachelor of Science after 1910.

Table 3 shows the average reduction of semester hours in prescribed courses through the fifty-year period. The prescribed courses tended to be higher for the Bachelor of Science degree than for the Bachelor of Arts after 1890. The range of semester hours prescribed and the percentage of the courses prescribed are also indicated in Table 3.

In the early years of the American colleges a relatively small number of courses was offered and these were required of every

TABLE 3
SPECIFIC AND GROUP PRESCRIPTION OF COURSE WORK FOR THE
BACHELOR OF ARTS AND BACHELOR OF SCIENCE DEGREES
IN 105 COLLEGES FROM 1890 TO 1940

	1890	1895	1900	1905	1910	1915	1920	1925	1930	1935	1940
Mean Semester Hours Prescribed:											
B.A.	115.5	101.8	91.4	82.4	74.4	61.6	56.2	55.1	49.0	43.1	40.2
B.S.	112.5	102.2	92.3	87.1	76.5	65.3	56.7	56.0	53.0	51.8	51.0
Range of Semester Hours Prescribed:											
B.A.	50-180	45-180	31-201	17-197	8-182	4-142	4-130	6-130	5-113	0-96	0-140
B.S.	46-174	58-159	64-155	17-163	8-142	8-135	4-114	5-106	0-92	16-108	14-114
Percentage of Prescribed Courses:											
B.A.	85	77	70	64	58	49	44	44	39	34	32
B.S.	86	78	70	67	60	52	45	45	43	42	42

student; as the free-election plan became common it was necessary to enlarge the college curriculum. In this study it was found that 215 different courses were prescribed by one or more of the 105 colleges for the Bachelor's degree. However, 104 of these courses were specified by a single institution.

The prescribed courses have been grouped under seven major-subject heads in the following numbers: social science—72 courses, English—41 courses, natural science—27 courses, philosophy—20 courses, religion—16 courses, mathematics—12 courses, foreign language—8 courses. The remaining 19 courses that could not be classified under any of those headings were included with "Other Courses" or under the classification "Two or More Departments."

CHANGES IN SUBJECT-MATTER REQUIREMENTS

The significance of the study is best portrayed in the figures shown on Table 4. This table gives the average number of semester hours prescribed in the different subject-fields, and the average number of

TABLE 4
AVERAGE NUMBER OF SEMESTER HOURS PRESCRIBED IN THE DIFFERENT SUBJECT FIELDS FOR THE BACHELOR OF ARTS AND BACHELOR OF SCIENCE DEGREES AND THE AVERAGE NUMBER OF SEMESTER HOURS OF ELECTIVES FROM 1890 TO 1940

	1890	1895	1900	1905	1910	1915	1920	1925	1930	1935	1940
Foreign Language											
B.A.	42.5	37.7	33.6	28.9	24.0	18.3	15.0	11.4	10.8	8.4	7.3
B.S.	22.0	19.6	18.9	18.1	16.1	13.3	11.1	10.3	9.5	9.3	7.9
Mathematics											
B.A.	15.3	13.5	10.6	9.2	7.2	5.6	3.7	2.5	1.9	0.9	0.7
B.S.	19.1	15.9	13.2	12.4	10.9	7.4	5.5	4.7	5.0	3.6	3.4
Science											
B.A.	18.0	14.8	12.0	9.9	7.5	6.9	6.0	4.9	5.3	4.2	4.4
B.S.	29.1	29.0	27.6	26.8	20.6	16.0	13.0	10.8	11.3	8.4	8.4
English											
B.A.	13.0	12.4	12.8	12.6	12.2	11.0	9.9	9.4	9.3	8.1	8.2
B.S.	13.9	12.6	11.3	11.6	11.0	10.2	8.9	8.8	9.4	9.3	9.8
Social Science											
B.A.	9.1	8.4	8.0	8.0	7.1	6.2	5.5	5.6	4.7	4.4	5.3
B.S.	9.9	8.1	7.0	6.7	6.5	5.2	4.7	5.1	4.4	4.9	6.3
Philosophy											
B.A.	9.7	8.6	7.6	7.2	6.3	4.4	3.2	2.8	2.0	1.4	1.5
B.S.	9.2	8.7	7.5	7.1	5.2	3.7	2.7	3.0	1.8	1.3	1.8
Religion											
B.A.	5.9	5.7	5.0	4.6	4.9	5.0	4.7	4.3	4.1	3.5	3.4
B.S.	5.6	5.5	4.7	4.0	4.9	4.9	4.2	3.9	4.3	4.2	3.8
Other Courses											
B.A.	1.8	0.5	1.6	1.0	1.8	1.4	3.3	5.4	3.6	3.7	3.6
B.S.	3.7	2.8	2.1	0.2	0.6	1.5	2.1	3.5	3.1	3.9	3.9
Two or More Departments: B.A.	0.2	0.2	0.2	1.0	3.4	2.8	4.9	9.0	7.3	8.5	5.8
B.S.	...	...	...	0.2	0.7	3.1	4.5	6.8	5.1	6.9	6.6
Average Prescribed:											
B.A.	115.5	101.8	91.4	82.4	74.4	61.6	56.2	55.1	49.0	43.1	40.2
B.S.	112.5	102.2	92.3	87.1	76.5	65.3	56.7	56.9	53.9	51.8	51.9
Average Elective:											
B.A.	19.5	31.2	30.5	47.1	53.3	65.1	70.1	71.4	76.6	82.3	84.8
B.S.	22.5	30.8	38.6	42.4	51.2	61.4	69.6	69.6	71.7	73.6	73.1

semester hours of electives for the Bachelor of Arts and Bachelor of Science degrees at the eleven intervals, 1890-1940.

In addition to the decrease in the total number of semester hours needed for a degree during the fifty-year period, there has been a decrease in the prescribed hours in all of the major-subject fields. The percentage of this reduction can be compared by referring to Table 5 along with the figures that are shown in Table 4. It will be observed that mathematics (for the Bachelor of Arts degree) suffered the greatest reduction, 95 per cent, by decreasing from an average of 15.3 semester hours in 1890 to an average of 0.7 in 1940.

English (for the Bachelor of Science degree) showed the least reduction, 29 per cent, by decreasing from an average of 13.9 semester hours in 1890 to an average of 9.8 semester hours in 1940. Of the seven major-subject fields included, English, social science, and religion showed less extreme reductions in semester hours required for a degree.

TABLE 5
PERCENTAGE OF DECREASE IN PRESCRIBED COURSES IN THE
DIFFERENT SUBJECT FIELDS FROM 1890 TO 1940

Field	Bachelor of Arts	Bachelor of Science
Mathematics	95	82
Philosophy	85	80
Foreign Language	83	64
Science	76	71
Religion	42	32
Social Science	42	36
English	37	29

Greek and Latin were the most frequently specified languages for the Bachelor of Arts degree; German and French were the most frequently specified languages for the Bachelor of Science degree.

The most commonly required courses in mathematics were algebra, geometry, trigonometry, and calculus. During the early years studied, a number of the colleges prescribed courses in surveying and mechanics.

In the field of science, the most commonly required courses were chemistry, physics, geology, and biology. However during the earlier periods studied astronomy, botany, physiology, zoology and mineralogy were often specified by the colleges.

The courses most frequently required in the field of English were composition (or rhetoric), English literature, and speech. It is somewhat surprising that American literature has never been a common requirement for a Bachelor's degree in these colleges.

The large number of different courses that have been prescribed in social science has resulted in no one course becoming a standard requirement, with the possible exceptions of economics and European history. Courses in American, English, and ancient history have been prescribed by a limited number of colleges; this was also true of courses in political science, American constitution, sociology, and law.

Three courses, psychology, ethics, and logic have been commonly required in the field of philosophy. Of these, psychology was required by the largest number of the colleges. History of Philosophy was also frequently specified.

In the field of religion, two courses, Bible and Evidences of Christianity, were most often required. The latter has practically disappeared from the requirements of colleges today.

Among the miscellaneous courses that have been required for a Bachelor's degree, physical education has become one of the most commonly required. Other courses that have increased in importance, but to a smaller degree, are hygiene, orientation, art, and education.

Of all the courses that have been required for a Bachelor's degree, only two remain as nearly universal requirements: English composition and physical education.

The program of studies for present-day students is vastly different from the 1890 pattern. A student now selects the major portion of his program, in 1890 his education was limited to a clearly outlined schedule set up by the college. Today a person may decide *which* foreign language he desires to study; or even greater freedom is permitted by allowing work to be done in two or more departments. It has also become a common practice to accept work that has been done at the secondary level in order to fulfill specific requirements. Proficiency tests are being administered to determine whether a student needs further study in foreign language, English, or even other subjects at the college level. From 1890 to 1940, the freedom of course selection increased from 15.7 per cent elective to 66.0 per cent elective for the Bachelor of Arts; and from 16.5 per cent elective to 59.3 per cent elective for the Bachelor of Science degree.

The Future of the "Veteran Problem" in American Colleges*

DAVID D. HENRY

WHICH crisis is critical today?"

The many problems created by the phenomenal postwar enrollments, particularly of veterans, make this query something less than whimsical to most college educators. However, we have sustained ourselves in meeting the overload with the thought that the "emergency" would not be of long duration. Now we are beginning to realize that our "emergency" institutional problems cannot be solved by temporary expedients; the load we have been called upon to carry will be with us for a number of years.

We know that many veterans who have wanted to take up college studies have not been able to do so. We know that others for one reason or another have chosen to delay their entrance into college. Some of these wish to take advantage of immediate job opportunities and save the "GI" benefits for some future time. Others have sought a period of adjustment to civilian life before taking up campus work. Still others who have observed the "emergency" conditions under which veterans attend school on most campuses have preferred to wait for better conditions than the poor housing and overcrowding now characteristic in the nation's colleges. Then we must not forget those who are still entering the armed services every day and who will be eligible for "GI" benefits after their release from service.

The sum of these veterans makes a formidable demand upon the colleges for a number of years ahead. And in defining that potential load, we must not forget the "backlog" of civilian students who did not attend college during the war years and now want to do so, as well as their younger brothers and sisters, who in increasing numbers are joining the parade for a college education.

We should not really refer, then, to "veterans' problems" in this connection, but to institutional problems precipitated by the new enrollment demands. The first and foremost of these is the task of

* An abstract of an address before the Michigan Association of Collegiate Registrars, East Lansing, December 5, 1946.

providing the basic minimum physical facilities required to do the job.

IMPROVISATION SHOULD END

Our first reaction in meeting the new surge of enrollments was to utilize whatever ingenious improvisation could be devised. Action had to be taken promptly, without much choice of alternatives. The measures so adopted have been almost heroic; certainly the work done up to this point has represented a complete dedication to giving the best possible effort to meet the needs of veterans. It is to be regretted, of course, that we did not more accurately anticipate the demand and that the best estimates of the official national agencies were far short of later developments. It is also to be deplored that the federal government made a commitment for educational service to veterans without examining the extent to which the institutions of the country could meet that commitment, and that measures taken by the federal government up to this point have not at all met what could properly be considered to be its obligation for a war-related responsibility. The states and localities and private institutions, however, did not "pass the buck." They recognized that they could not wait for a federal program and that if the situation were going to be met, it had to be met on the local front.

The willingness on the part of the institutions to meet the emergency, however, should not be substituted for national policy. The expectation for the federal government to render assistance is even more valid at present than before—now that the need is clear and demonstrated. Further, as experience now shows that the demand for service is of long range and the cost of temporary measures inappropriately high, the federal government is more than ever justified, even obligated to underwrite permanent facilities in some measure.

It follows, I believe, that in calling upon the government to meet the continuing "emergency" with permanent facilities rather than temporary, it is incumbent upon institutions to assess their future potential need most carefully. Any effort to "use" the veteran to pry open either private or public treasuries for building needs not directly related to the veteran or his future on the campus is dishonest. The effects of crying, "Wolf, wolf" will be the traditional ones. I do not believe there has been much exaggeration in defining physical needs, but the temptation to be careless in interpreting the future of the veterans' problem is great. It is very easy indeed to fail to separate

our concept of long-range institutional needs from the requirements for handling the veteran. It would be a sad result if the word of the educator in the future were questioned because of his failure now to be scrupulously careful in relating the needs for handling veterans to long-time institutional needs.

THE VETERAN WILL APPRAISE

The effect of such representation upon the veteran himself must be considered. He is going to be an important part of the constituency of the college, both as an alumnus and as a citizen. He will long resent any effort to "use" him for unrelated institutional purposes, however worthy those purposes may be. Already, I think, he is a little bit skeptical about some of the institutional claims in his behalf. We must not allow any cynicism about our institutional objectives to be supported in any way by fact.

Both the institution and the veteran should remember that, while the college enrollments of veterans are large, the great majority of returned servicemen and women are not receiving educational benefits. It would not be difficult, if too much is claimed for the college veteran, either for him as an individual or for his institution, to arouse the resentment of that proportion of the veterans who are not profiting from those benefits. The answer is obvious: the "GI" educational program is an opportunity for all and not a privilege for a few, but this perfectly rational and sound concept can get lost in the competition for public funds.

WE MUST DO A GOOD JOB

An over-all consideration in the "veteran problem" that is of the utmost concern is the importance of our doing a good job in veterans' education. I have mentioned that the veteran is to be a vital part of the institution's constituency in the future. If he leaves the campus unhappy with his experience there, or with a feeling that it was not of the value that he had anticipated, his disillusionment can have a most harmful effect. We can be flattered now that his expectations are high, that the overcrowding is an index to the popularity of a college education, and presumably, to its worth. We must remember, however, that higher education itself is on trial.

It is at this point that we should criticize those institutions which over-reach themselves in admitting numbers they cannot adequately

serve. The veteran may be able to tolerate unsatisfactory living conditions, but he will never forgive any short-changing on educational values. We must limit our numbers to our capacity to do a sound job, and shy away from the temptation to over-work the faculty or dilute the instruction with too large classes and with inexperienced or poorly equipped new instructors.

It also behooves us, while doing the best job of which we are capable, to make sure our veterans discard the notion that a college degree is a magic pathway to success. Successful graduation from a university does not guarantee the individual the fulfillment of his economic and professional expectations. This point is so obvious to the educator that it is hardly worth mentioning, but it is not always obvious to the student. We must more aggressively interpret to the student the meaning of a college education than we have done in the past. We must disabuse him of some of his false expectations so that he will not suffer disillusionment. We must eradicate the Hollywood concept of college life, as well as refute the popular false claims made for the values of college education. The true values of a college education need no glamorous interpretation, and the importance of our work needs no artificial inflation.

NON-VETERANS DESERVE THE BEST, TOO

Next to the provision of physical facilities, the most serious problem in handling the higher enrollments has had to do with the matriculation and admission of students. Again, it is not too much to say that the college officers charged with this responsibility have performed their task heroically. The willingness to approach the veteran as an individual, to attempt to measure his experience functionally, and to place him in school at the point of his ability to do work rather than in terms of the pat formulas of the past as to credits and traditional procedure, has proved once and for all that our institutions are flexible and concerned with education rather than with ritual.

The added burden of this method, however, has produced a great weariness and a longing for a return to the old procedures. A registrar said recently, "How soon can we begin treating veterans as non-veterans?"

If we follow the implied suggestion in this plaintive plea, we shall lose something important from our recent experience. I would much

rather approach the issue with the question, "How soon can we begin treating non-veterans as veterans?"

Early in the veterans' program, at a meeting of our administrative staff, we reviewed the kinds of institutional practices that we hoped would be useful in handling veterans—the testing, the counseling, the supervision of the individual student for prompt appraisal of his success—all those practices that have since become common. At the conclusion of the discussion one of the members of the staff remarked, "After all, what we are proposing for veterans is probably what we should have been doing for all students through the years."

Undoubtedly there are some practices we shall wish to abandon that have been peculiar to the handling of the matriculation and admission problems of veterans. On the other hand, there have been some by-products that I believe we should earnestly hold onto. In general, our philosophy has been, "How can we get people of merit and worth into the university?" not "How can we keep them out?" We have sought all known scientific ways of appraising native ability and past achievement as a prognosis for success in college. We have adopted a greater use of the examination as an instrument of admission. Our approach has been, in general, "What is good for the student?"—not, "How much residence has he had?" or "What prerequisites has he omitted?"

The temptation is great for admissions officers, faced with the task of saying "No" to so many students, to develop a negative attitude toward all students, particularly that middle group for whom an ill-considered "No" is a serious loss to the individual and to society.

In general, I plead for the continuation of the functional approach to the appraisal of student potential and a refusal to fall back into some of the irrelevant stereotypes of the past.

Let none of this be considered a plea for admitting the student of low ability or the student whose chance for college success is poor. It is a waste of institutional resources and human resources to enter into a college program a student who is not prepared to profit by it. But the human factor, so difficult of measurement, is an essential part of the inventory, and we are under obligation to be as sure as we can be that we are conserving our best resources for college work.

In this connection, I enter a note of protest against the institutional practice of using the current enrollment demand as an excuse for raising scholastic requirements for admission beyond those formerly

in effect or establishing other artificial screening criteria. A change of entrance requirements which would result in the exclusion of those who normally would gain admission to the campus either is an indictment of our previous standards, or it is submission to *easy* administration, which ignores the human element in the admission process. Further, it will justifiably bring condemnation for its discriminatory mal-distribution of educational opportunity.

VOCATIONAL MOTIVATION CAN BE WHOLESOME

Another continuing issue with us is how properly to direct the vocational motivation which is characteristic of the veteran. We have had our academic arguments in the past between "vocational" and "general" education, but some of us who have been strong advocates of general education have deplored the concomitant conclusion that such general education is unconcerned with the usefulness of college work in one's vocational adjustment to life. Whether we like it or not, all students, not veterans alone, have a much stronger vocational "drive" in attending college than we have recognized. The answer, I think, is not to consider general education *versus* vocational or professional education; the answer is to acknowledge that all education should be useful to the individual. The concept of education for education's sake is a relic of the past and perhaps never did exist. The Latin teacher who regards his work as in cultural isolation too often forgets that the majority of his students who major in his field intend to make a vocational use of their education by teaching Latin. I would not capitulate for one moment to a utilitarian interpretation of a college education, but I think we need to learn the broad difference between relating *all* education to usefulness and interpreting it as either "general" or narrowly "vocational." As "Art for art's sake" must yield to "Art for life's sake," so "Education for education's sake" must yield to "Education for happiness and usefulness in life."

If we are as concerned about our holding power on students as we should be, we will give greater attention to the student's evaluation of his college work to himself.

VETERANS ARE STUDENTS

Another problem deserving our fullest attention is the extra-curricular life of the veteran. We are told that many veterans "shy away" from the extra-curricular activities of the campus. If we believe

in developing the "whole" student and that extra-curricular activities have a part in that process, then we should find activities that will meet this objective for veterans, and not be content to let the veteran ignore the present offerings. It is granted that our present machinery is geared pretty largely to a younger group of people, and we shall have to be ingenious indeed to discover those outlets for the veteran which will produce the same benefits for him as have characterized the general program in the past.

Related to this issue, of course, is the way the veteran lives. In our great desire to serve as many veterans as possible, I am sure that we have too often asked him to live in conditions that should not have been allowed, and we are giving him his education in a setting that we know is not adequate. Just where we shall draw the line and say, "It is better for you to wait and come when we are prepared to handle you," I do not know. It is an obscure line—but we must find it, in the interest of the veterans who cannot be handled adequately, as well as of those already enrolled.

THE "GI" PIONEERS

The "GI" Bill is regarded by many as a great experiment in the equalization of educational opportunities. I believe some form of it will be extended to the civilian students of the future. Before the war we were perilously close to an economic selection of students—an economic selection which, in time, would be not only a dangerous loss in the conservation of human resources, but an undemocratic force in American life.

If we believe it is important that veterans be educated not only as a means of our expressing our gratitude to them, but because their education is important to society, then the logic of this belief impels us to carry the same program forward in the years ahead to encompass all youth.

Undoubtedly the handling of the "veteran problem" is the greatest challenge to higher education in all of its history. How well we meet the task will influence greatly the future course of higher education in this country. It behooves us, therefore, to apply all of our energy and all of our knowledge to doing the task as well as we know how. Certainly we must be aware of the long-range implications and set aside forever the notion that we are engaged in a temporary emergency which will soon pass and allow us to slip back into the placid habits and practices of other days.

Concord College Plans a Field Service Program

ESTON K. FEASTER

FOR THE first time in its history, Concord College has initiated a field service program which is a comparatively new undertaking as far as West Virginia is concerned. For too long there has been only a slight functional relationship, if any, between the college which trains teachers and the public school system which employs the teachers the college trains. Both the college and the public schools have functioned primarily in their own limited areas. They have not recognized their individual problems as problems related vitally to each other. Consequently, neither has recognized its full responsibility to the other in the solution of its problems. The college has purported to train teachers on the campus without knowing specifically what is expected of them in the field. Since the training institution has had little or no direct contact with the public schools in actual operation, it could not very well be otherwise. On the other hand, the public school officials have accepted the teachers which the training institution has sent them. They have recognized keenly, in some instances, weaknesses in the training program. Teachers have not been adequately trained for the specific work which they are expected to do and the services which they are intended to render. In many instances, beginning teachers are expected to assume responsibilities for which they have had no background or experience in their pre-service training program. Unfortunately, even though public school officials have recognized these weaknesses, they have had little or no opportunity to do anything about them. A working relationship between the training institution and the public school officials of its service area has not existed.

This aloofness is good neither for the college nor for the public school system. It has resulted in an attitude in which the public school officials criticize the college for not doing a better job, and the college, in turn, criticizes the supervisors for not doing a better job with the teachers which they receive. Consequently, the responsibility is shifted from one to the other depending upon who is offer-

ing the criticism. Such an attitude cannot conceivably result in any improvement or progress.

It must be recognized that both the college and the public school system which the college serves have a common task; namely, to work together for the improvement of educational opportunities for the boys and girls. The purposes of the field service program stated briefly are: First, to provide an opportunity for the college and public school officials to work together more intimately in their common task; second, to tie the college and public schools more closely together; and third, to bridge the gap which has existed for too long between the college and its service area.

At the very outset it must be recognized that there are some definite limitations as to the services which the college can render. First, any new undertaking of this type necessitates careful planning by the college and the public school officials in the area served by the college. Both the college and public schools must recognize that they have mutual problems; they must also recognize that each has its distinctive service to contribute to educational advancement. In the initial stages, it is important that the training institution, as well as the public schools, keep clearly in mind its own special functions which are expected of it; it is likewise important that both realize their mutual interests and problems, and that they approach the solutions with understanding and in the spirit of co-operation. Neither can work effectively at cross purposes with the other. Thoughtful and careful planning at the outset will lay the groundwork for further development of this type of program. Furthermore, another factor which affects the services which the college can be expected to perform is the facilities of the college itself. To be effective, there must be a director of the field service program to whom is delegated the authority to direct and coordinate the work. Although the director is responsible for planning, initiating, and carrying out the work in the field, he cannot be expected to render each of the specific services himself. As liaison officer between the public schools and the college, he is expected to discover the services which need to be rendered, and to organize and use the facilities of the college to perform these services in both on- and off-campus situations. To accomplish this purpose, there is need for participation by many members of the faculty. A college adequately staffed will make possible greater participation in field work and will aid materially in an extension of its services.

The field service program as planned and initiated by Concord College will function in various areas. First of all, the college will follow up all beginning regularly certified teachers in its service area. It should be recognized that professional education does not terminate with the awarding of a degree or recommending a candidate to the State Department of Education for certification; on the contrary, it is just beginning. In-service education, to be most fruitful, should be a continuation of pre-service education, and the college has some responsibility for the former as well as the latter. From this standpoint, the college owes a responsibility to those whom it trains to be teachers and must recognize that its responsibilities do not cease when the prospective teacher leaves the college campus and secures a teaching position. This phase of the work has two definite purposes: namely, to assist beginning teachers in their adjustment to their new situation and to assist the college in evaluating and improving the teacher training program.

The beginning teacher, regardless of his pre-service training program, soon discovers problems. In some cases, depending upon the resourcefulness of the individual and the adequacy of his training, he will find, to some degree, his own solutions. In many cases he may be assisted in attacking his problems by those who have had more training and experience and thus may make a more rapid and satisfactory adjustment to his new situation. The college field representative, as well as the supervisor, can be of help through suggesting readings, pointing out the value and use of instructional materials, and holding interviews and group conferences both on the campus and in the field. It should be recognized that through direct contact with the teachers which it trains the college will discover many valuable cues for improving its own program. Those who work in the field have the opportunity to analyze the adjustment of teachers, to discover their problems, to collect data pertaining to their difficulties, and, as liaison officers between the institution and public schools, not only to carry services to the teachers but also to make recommendations to the college by which it may evaluate and study more realistically its own program, and, through such evaluation and study, discover its strengths and weaknesses.

Second, the college will assist counties with their in-service training program for teachers by helping with study groups, workshops, and other similar projects. It should be recognized that the college has the responsibility, through co-operating with the public schools of its

area, of assisting with projects that will result in a continuous improvement of the quality of educational practice. Through working intimately with teachers and helping them with their problems, the college will in turn benefit by keeping in tune with the really live problems of education as they actually exist.

Third, the college will organize workshops and other similar projects on the campus designed to meet the specific needs of public school teachers. The Advisory Committee on Field Service, composed of public school officials, by working with committees of teachers in each county, is now assisting the college in setting up workshops for the next summer session. Such co-operative planning by college faculty members and public school officials will tend strongly to develop a type of workshop designed to help teachers specifically with their own problems.

Fourth, the college and public school officials will study together the program of teacher training and set up definite suggestions for its improvement. The public school official who employs the teachers which the college trains is in a position to make a rather critical evaluation of the teacher-training program. Through questionnaires carefully designed, personal interviews, and group conferences, valuable ideas can be discovered. These ideas are valuable to the college staff as it works on and experiments with a program of teacher-training. From this standpoint, teacher education becomes a co-operative project, a joint responsibility of the college and the public school.

Fifth, the college and public school officials together will work out a plan for evaluation of teacher growth and efficiency which can be used in both pre-service and in-service training of teachers. If in-service education is a continuation of pre-service education, the former should be built upon the latter. Again, if the college and public schools are not to work at cross purposes, co-operative planning is necessary.

Finally, the college and public school officials, recognizing the pressing need for teachers, together will plan the program for the recruitment and guidance of prospective candidates. Certainly, it would seem that in each of these phases there are opportunities without limit for the training institution and the public schools jointly to cooperate for their improvement. Doubtless new possibilities will result from further planning and experience.

Possibly it is as important to understand what the field service

program is not intended to do as it is to understand what can be expected of it. It should be understood that this program is not intended in any way to encroach upon, lessen, or interfere with the work and function of the county supervisor. Rather, if anything, it increases the scope of his work. Both the public school officials and the college recognize this service as a co-operative undertaking. Consequently, the college will attempt no service or activity in any county of its service area unless it has the approval of and can be carried on in total conformity with the policies of the county staff. This common undertaking is possibly the best assurance of its final success. Furthermore, it should be understood that this service is not intended to serve as a recruitment agency for the college; neither is it designed to increase traditional extension services. Although some of the work may result in the earning of credit by those participating, services rendered through the field service program are in no sense limited to projects for which credit is earned. In fact, most phases of work done in the field, as it is envisioned, lie outside the realm of work for which credit is given.

Concord College expects the following results from this new program: First, a better working relationship will develop between the public schools and the college. Second, beginning teachers will be assisted in making adjustment more quickly and easily to their actual teaching situations. Third, better co-ordination between the pre-service and in-service training of teachers will develop. Fourth, the teacher-training program on the college campus will be improved. The college, through its representatives, will have direct contact with the actual problems as found in the field. Public school officials will have an opportunity to study the teacher-training program with the college education staff and to offer their suggestions for its improvement. Fifth, the college will be able to render better services to the public schools of its area. Finally, the public schools will have the opportunity to render valuable service to the college.

Through a field service program co-operatively planned, the public schools will be brought to the campus and the college will be taken to the public schools. In this spirit of joint responsibility for improving educational practice at all levels, there is hope that the two may move forward together.

The High School Principal Speaks to the Registrar

LEONARD P. STEWART

IT IS NOT only a pleasure to meet with you but an opportunity which I greatly enjoy. I fear that I shall contribute little and gain much from our exchange of views this morning. It is true that the problems confronting college registrars at this time are really difficult, not to say appalling. The manner in which the administrators in the secondary education field handle their problem of accrediting pupils for graduation will either add to or subtract from the perplexing situations with which you are now confronted or which you will be called upon to solve before next September.

The reports generally received about the way veterans apply themselves to college work are gratifying, but we need to know in what fields they are succeeding and whether the major portion of the work is really on the college level. On this point I am a bit suspicious, and for this reason: thus far I know of no single case where a man who attended my high school for as much as two years has failed in the General Educational Development Test. I am frank to say that I doubt whether a young man who has had only two years of high school English, one or two years of algebra and plane geometry, or in some cases no high school mathematics at all, and no experience in a laboratory science is ready to undertake the traditional Freshman program in a good school of Liberal Arts. The test says, however, that the veteran who passes it has acquired the power through age and experience to do work on the college level, and the reports we get seem to support this assumption. But is this veteran ready for college algebra or a foreign language on the college level? Is he carrying a course in science as successfully as the boy who had physics and chemistry in high school? I grant that he may do good work in English and the social studies.

Your problem then, it appears, is to determine how you can achieve for this young man that nice proportion in the five major fields of English, language, mathematics, science and history which for so long has been considered one of the principal purposes of the Liberal

Arts college. As I consider the matter there seem to be two plans to follow:

1. Forget the traditional plan so long followed. Give this veteran a large amount of English and social studies. Many of these students no doubt have aptitude for music and art. If so give them work in these fields. There is no question that the Fine Arts fields have great cultural value for all of us. Develop courses in practical mathematics that will furnish the student with fundamental concepts and in a shorter time than the high school student gets them. Develop courses in science less rigorous and technical than would be needed for the average high school graduate of average ability. For those who want a foreign language intensive courses must be provided, but no pupil should attempt this work who has no special aptitude for it.

It must appear from the foregoing that much of the ground covered and for which college credit will be granted is really in the secondary school field. For this I fear there is no alternative for the registrar dealing with the veteran who would be out of place in a high school veterans' center, or who is too proud to enter one.

2. In Cincinnati and other cities large enough to make the plan possible veterans' centers have been established. Here the students may rapidly cover the essential foundation work generally understood as belonging to the high school and necessary as prerequisite for first year work in a Liberal Arts college. The larger the number of such centers and the greater the number of veterans enrolled therein, the easier will become the problem facing the college admissions office when these men apply for enrollment. There are other advantages. It is possible in this way for veterans to save their full allotment for college expenses and a number of them do so. The advantage for those who do not save their allotment is that the students are homogeneous, have the same or similar qualifications and can be better grouped for intensive and accelerated courses. The objective is to plan the work so that not more than four years will be required in which the student can obtain his degree.

If the foregoing seems to be the philosophy of an ultra-conservative, let me direct your attention to the Harvard Report on General Education in a Free Society. On page one hundred we find this statement: "The common and desirable division within these eight units (proposed requirement) would probably be three in English, three

in science and mathematics, and two in the social studies. But—and this is the important point—this half of the school work to be spent on general education would seem the barest minimum, either for those not going on to college or for those who are." Except for a respect for accuracy in quoting I would have finished the statement with an exclamation mark, for there are not many high schools that now demand for graduation as extensive a requirement as the one stated above. If I am conservative, then there are many who are becoming so. The pendulum is definitely swinging away from more to fewer electives in high school. Boards of Education are beginning to take the position outlined in the Harvard Report. It is to be hoped that we do not go too far in this direction and so ignore the individual differences in our pupils.

The second topic I wish to deal with in this brief talk has to do with that part of the blank submitted to high schools by college registrars for information on prospective students and which deals with the personal characteristics of the candidate. The time is now past when you men and women are concerned only with the grades of high school students. You want a picture of the entire man or woman.

It is apparent from a study of these blanks that you want to know about the same thing in regard to the applicant, but what diverse ways you have of asking for it! How much easier it would be for the school secretary if she did not find it necessary to familiarize herself with a hundred different blanks! It would be easier too for the principal or dean of girls or other guidance officials to obtain a composite estimate from the various home-room teachers or class officers regarding the pupil under consideration.

An attempt in this direction has been made by The National Association of Secondary School Principals. This organization obtained a copyright in 1941 on a blank which is a regular transcript-of-grades form on one side and a personal evaluation on the other.

I personally like the transcript form better than the one that has been used for some time in Ohio. The personality record blank is excellent and seems to enumerate about all the important qualities needed to give adequate information to the admissions committee. A smaller, simpler form supplementary to this sheet has been proposed to be used by a number of teachers. This material can easily be assembled and a composite rating given on the sheet that is sent

to the college. I place great value on a composite rating. I think it is far more reliable than an evaluation by one individual.

I should like to suggest that you give consideration to this blank or a similar one. By its use the task of obtaining information will be made easier and the data transmitted to you will be more accurate.

Salute to the Professors

CLYDE W. PARK

PROBABLY no other occupational group has been more decisively labeled than college teachers. Cartoons and caricaturing definitions have established in the public mind a so-called professorial type, with a universally accepted set of identifying traits and details. For example, absent-mindedness—the professor in a revolving door, trying to recall whether he was going out or coming in; naïve inexperience—"A professor is a person who never got out of college"; confirmed impecuniosity—"A professor is a man who has a Phi Beta Kappa key on one end of his watch chain and no watch on the other." Among visual signs of identification are the professor's horn-rimmed spectacles, his far-away look, and his inevitable cap and gown.

Thus, exaggerated half truths and constant repetition have built the concept of the "typical professor," who, of course, is only a myth. In more than forty years of daily contact, terminated only recently by retirement, I have yet to meet the standardized person that tradition has created, or to find any one who has met him. The truth is that college professors are the most individual, the most unstandardized people to be found in an age of conformity. They are society's chief corrective against the deadening influence of intellectual regimentation. Their specialty is independent thinking, and their most important function is to stimulate original thinking in others. The means by which this stimulation is brought about ("methods" is too formal a word) may vary widely with circumstances and with the individualities of the professors themselves. Particularly in the more creative fields of scientific research and artistic achievement, the most effective teaching is done by example. Almost without realizing it, the capable student acquires the approach and the enthusiasm needed to release his creative energies.

Although college teachers may exhibit great diversity in age, appearance, temperament and fields of study, yet, if they really qualify for their vocation, they have one requirement that is common to the entire group: namely, a scholar's conscience. This means that they have sincerity, integrity, an uncompromising devotion to accuracy and thoroughness; that they are more interested in intellectual

achievement than in personal advancement. Now and then, it is true, some one is found teaching in a college who does not fully meet this high standard. Of such a person a Frenchman might ask, "What is *he* doing in that gallery?" The chances are that he will not be there very long, and will not be very happy while he remains. Superficiality and hollow pretense do not thrive in a college atmosphere. Hypocrisy, always an insult to people's intelligence, is the more transparently ridiculous where there is so much intelligence to insult. The freemasonry of professors is quick to distinguish between earned and unearned credit, between deserved recognition and that which goes by favor. Hence, a pretender is promptly assigned to the classification in which he belongs. It could not be otherwise. Compromise would be stultifying, and acceptance of a debased intellectual standard would deprive the professor of his best incentive and his chief compensation.

For it is evident that the greater part of the professor's reward comes from intangible satisfactions. Historically this consideration has reconciled him to a vocation that is noted for long and costly preparation, small starting pay, slow promotion and relatively low salaries, even in the highest brackets. The "vow of poverty" implied in the Phi Beta Kappa watch chain allusion is not without some factual basis. In normal times the professor's income is moderate, at best. In a period of inflation his unfavorable economic position is thrown into sharp relief. Readjustment of salary scales, if accomplished, often fails to overtake runaway increases in living costs. Obviously, the professor cannot be expected to do his best work in the midst of privation which falls even more heavily upon his family than upon himself. Under such conditions there is little comfort to be derived from the fact that he has stable employment. Certainty of tenure, formerly one of the attractive features of the teaching profession, now becomes an ironic reminder that by his long-term commitments the professor has given hostages against escape.

During the trying period of inflation that followed the First World War, professors showed that they had too much pride to accept a mendicant status or to submit indefinitely to economic injustice which remained uncorrected. Unwilling to continue as prisoners of fate, they displayed surprising resourcefulness in finding alternative occupations. But society, mindful of its long-range interests, cannot afford extensive desertions from the profession, still less the discourage-

ment of promising young scholars from whose ranks the teachers of the future must be recruited.

In a "scrambling and unquiet time" like the present, the importance of the professor's claims upon society can easily be overlooked. And yet it is precisely at such a time that his contribution is most needed. Utilization of the country's best brains, development of scientific research, including the training of researchers, clarification of thinking in the midst of complicated issues, satisfaction of youth's proper demand for higher learning—these tasks call for the best intellectual leadership that is obtainable. Although business and industrial corporations recognize the value of such ability and are willing to reward it handsomely, the colleges have one advantage that enables them to compete successfully when conditions are anywhere near equal. To those who are best qualified for teaching, the appeal of the task itself is so strong an inducement that they are willing to overlook considerable differences in income. But there is a limit beyond which they cannot be expected to go, nor should it ever be necessary for their concessions to reach the point of sacrifice. In this matter a clear responsibility rests upon the authorities who determine college policy, including the budget allotment for teaching. Whatever expenditure is needed to keep the teaching staff intact and effective is obviously a first charge on their resources. Having due regard for the rapidly changing economic situation, they must somehow provide the modest compensation that will guarantee the professors a self-respecting standard of living.

Editorial Comment

USAFI

THE United States Armed Forces Institute has made a priceless contribution to the morale of the Armed Services, both during the war and since. More than 1,700,000 men and women, since the program began in 1942, have benefited from its courses, and to many of them USAFI has performed a service which will be reflected in greater usefulness and richer lives. The Institute is an achievement in which the Armed Forces, and indeed the entire nation, can take great pride.

Contrary to an impression which appears to have gained some currency, the program is NOT in process of dissolution. Its course offerings were recently reduced by about a fourth, but this was in recognition of the change which has come about in the type of personnel now constituting the Armed Services, and not as a preliminary step toward liquidation. Both General Lanham, Chief of the Information and Education Division, War Department Special Staff, and Commander W. H. Johnson, Officer in Charge, Educational Services Section, U. S. Navy, have recently gone on record as favoring continuation of the program. General Lanham says, "I believe it is consistent with the desire of the American people that we continue to offer the individual servicemen every off-duty educational opportunity within reason, both to improve his mental outlook and to make him a better soldier and a better citizen."

When Selective Service ceased inducting men last fall, the entrance into the Armed Forces of men holding college degrees practically ceased. There are thousands of service men, however, who have completed high school and who look forward to college entrance after they are discharged, and many of these men may be expected to present USAFI credit upon entrance. The AACR long since went on record as favoring college credit for USAFI courses of college grade, and there should be no change in this policy. Both the methods and the spirit of USAFI are in keeping with the best traditions of democratic education, and the Institute deserves the heartiest cooperation from the colleges.

Lost Generation

DURING the war, educators and men of science repeatedly decried the blind spot in our national vision which permitted promising young scientists to be drafted into the Armed Forces rather than allowing them to continue in training to meet the needs of a postwar world in which our national future was to depend upon the growth and the application of scientific knowledge. The United States, alone among the belligerents on either side, turned a deaf ear to these pleas, and now is faced with a serious shortage of trained scientists at the moment when they are more needed than ever in history. Dr. Vannevar Bush, Director of the Office of Scientific Research and Development, has estimated the number of scientific and technological students who would have received bachelors' degrees but did not because of the war at 150,000. He estimated that by 1955 the shortage of scientists holding graduate degrees in chemistry, engineering, geology, mathematics, physics, psychology, and the biological sciences will total 17,000. By 1950 we shall need upward of 337,000 engineers. We had 261,000 in 1940.

The influx of young veterans will ultimately close the gap, but not as rapidly as at first glance appears, because many graduate students have slowed down their studies to work part time as graduate assistants, partly to help finance themselves and partly to help their institutions meet the demands of suddenly swollen enrollments.

In his report to the President, "Science—the Endless Frontier," Dr. Bush reviews the disquieting statistics, and recommends that the Federal government take steps to provide for a substantial number of undergraduate scholarships and graduate fellowships. It is to be hoped that this recommendation will be crystallized into law.

In the August, 1946 issue of *The Lamp*, published by the Standard Oil Co. of New Jersey, Dr. James R. Killian, Jr., vice-president of the Massachusetts Institute of Technology, reviews all of the foregoing facts, and concludes with a plea to industry not to adopt the short-sighted expedient of raiding the college faculties to meet its needs for technologically skilled manpower. He points out that industry can always outbid the colleges, but suggests that this is no time to cripple the nation's effort to increase its trained personnel.

The heroic effort the colleges are making to accommodate the largest possible number of students has been motivated largely by the desire to make a place for every veteran who applies. In view of the

menacing shortages, both in teachers and in scientific personnel, it is important that these efforts be not diminished when the immediate pressures relax.

Wonderland

Alice never could quite make out, in thinking it over afterwards, how it was that they began: all she remembers is, that they were running hand in hand, and the Queen went so fast that it was all she could do to keep up with her: and still the Queen kept crying "Faster! Faster!" but Alice felt she could not go faster, though she had no breath left to say so.

The most curious part of the thing was, that the trees and the other things round them never changed their places at all: however fast they went, they never seemed to pass anything. "I wonder if all the things move along with us?" thought poor puzzled Alice. And the Queen seemed to guess her thoughts, for she cried "Faster! Don't try to talk!"

Not that Alice had any idea of doing that. She felt as if she would never be able to talk again, she was getting so much out of breath: and still the Queen cried "Faster! Faster!" and dragged her along. "Are we nearly there?" Alice managed to pant out at last.

"Nearly there!" the Queen repeated. "Why, we passed it ten minutes ago! Faster!" And they ran on for a time in silence, with the wind whistling in Alice's ears, and almost blowing her hair off her head, she fancied.

"Now! Now!" cried the Queen. "Faster! Faster!" And they went so fast that at last they seemed to skim through the air, hardly touching the ground with their feet, till suddenly, just as Alice was getting quite exhausted, they stopped, and she found herself sitting on the ground, breathless and giddy.

The Queen propped her up against a tree, and said kindly, "You may rest a little, now."

Alice looked round her in great surprise. "Why, I do believe we've been under this tree the whole time! Everything's just as it was!"

"Of course it is," said the Queen. "What would you have it?"

"Well, in our country," said Alice, still panting a little, "you'd generally get to somewhere else—if you ran very fast for a long time as we've been doing."

"A slow sort of country!" said the Queen. "Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"

Just the other day, when the problems of squeezing six or seven thousand students into accommodations for three or four thousand had kept a lot of us frantically hopping about; and the accompanying problems of giving some sort of education to the six or seven thousand loomed more and more forbidding, the Editor suggested that I write an editorial. On the way home I got to remembering the happy days gone by, when members of a college faculty—any members of any faculty—had time to look about them, meet with their friends for conversation or banter, read books, or simply put their feet up and do nothing at all. I remembered my college days, when a couple of men could desert the dormitory and go out on the lawn and lie there under the stars arguing and talking, and consider the time well spent; or when, for lack of anything to distract our attention from good books, we wandered aimlessly along the library stacks, pulling down a book here and a book there, and finding out how many things there are to find out about.

That was before the war, a long time before the war. It was in the days when digestion was considered as important as stuffing the craw. It was when Things were spelled with small letters, and were not considered more important than the people who dealt with them.

It would be pleasant, I thought, to stretch out when I got home, and perhaps think of an editorial; or perhaps just go to sleep for half an hour. Memories of loafing and inviting the soul jumbled up together, and made a vague pleasant misty sleepy dream—out of which two small young ladies roused me with demands for *Alice*.

So, in a busy, busy world I read *Alice*, and didn't get the editorial written after all.

S. A. N.

Ambassador of Good Will

MEMBERS of the American Association of Collegiate Registrars will learn with regret that our good friend from Canada, Dr. K. P. R. Neville, will soon retire as registrar of the University of Western Ontario. "K.P.R." as he is known to his many friends in colleges and universities throughout the United States, joined the Association in its early years, and not only shared in the development of our fine professional organization, but aided in securing for registrars the professional recognition they now enjoy as important administrative officers in institutions of higher education.

Becoming a member in 1919, and attending his first convention in 1922, Dr. Neville has contributed much to the Association in a number of capacities. His scholarly papers have given registrars in the United States a better knowledge of the Canadian system of education, and the transfer of students between the two countries has been facilitated because of a better understanding. In addition to the help he has given to those in the United States who must evaluate Canadian credentials, his wide contacts in the United States have been of value to his Canadian colleagues.

Dr. Neville has served as a valuable member of many of the committees of the Association, including the important Committee on Special Projects and the Editorial Board. In 1935, he was elected to direct the affairs of the Association as President, and the fine record of the year's activities culminating in the Raleigh Convention is evidence of his outstanding ability.

It has been a real privilege for members of the Association to have the friendship of Dr. Neville. Our lives have been enriched by his dynamic and charming personality, his rare gift of humor, his sound philosophy of living. He has done much to cement the friendship between our two countries, and we only hope that the Registrars' Ambassador of Good Will from Canada to the United States will continue to join us at our meetings for many years to come.

A.H.P.

Book Reviews

R. E. McW.

The United Nations, A Handbook On The New World Organization. Louis Dolivet, with a preface by Trygvie Lie. New York: Farrar, Straus and Company, 1946. Pp. 152.

Mr. Dolivet stresses the urgent necessity for more popular understanding of the purposes, organs, and powers of the United Nations; and by implication offers his 'Handbook' on the UN as a means to this end. Certainly, he makes no contribution to the student of international organization and administration and probably renders a disservice to the "popular" mind which he would enlighten.

The author creditably describes the structure of the organization, although the reader must occasionally assemble scattered fragments of discussion before he can see the various agencies, especially the General Assembly, in all of their ramifications. Under the title "The United Nations Headquarters" he devotes a single page to this subject and the remainder to the Secretariat in spite of repeated discussion of this organ in a chapter on the Secretariat. The uninitiated might find it difficult to pull the scattered pieces together.

Dolivet fails to place the UN in its proper historical setting. He credits the UN with innovations which actually developed under the League of Nations or many years earlier. He cites the novelty of the Economic and Social Council without recognizing that many agencies of the League have been transferred to this organ and that its structure follows closely the pattern recommended by the Bruce Committee of the League for integrating international social and economic programs and organizations. The author naïvely takes at face value too many provisions of the Charter, a dangerous approach in the light of League experience. He also fails to discuss adequately, if at all, basic problems and weaknesses which developed under the League system and for which the Charter provides no solution.

Dolivet confuses executive, legislative, administrative, and judicial functions, thoroughly muddling his attempt to define the relative power and jurisdiction of the constituent organs with loose statements, glib generalities, and false analogies. He makes the General Assembly the "supreme organ" and the Security Council "the world's most effective body." He credits the General Assembly with power to discuss anything, only to add several pages later the numerous Charter restrictions on this power.

Dolivet credits the people of the world with an influence on Council and Assembly decisions which ignores reality, and he fails to indicate how people might more effectively fulfill their responsibilities as world citizens which he advocates they should become.

Dolivet professes an objective approach, that his book does not render "a judgment for or against the organization." Nevertheless, in unfolding his story he devotes substantially more space to panegyrics than to critical analysis. The reader is forced to conclude that the author arrived at almost unqualified endorsement of the Charter and the structure it created. He does not claim the UN will guarantee the prevention of war yet he states that "those countries which have come together are going to make every effort to prevent or remove threats to the peace. . . ." He adds, after noting that the fifty-one member nations control over ninety per cent of the inhabitable earth, that "It is almost self-evident that no would-be aggressor, however powerful, would ever defy such a gigantic combination." Dolivet gives fleeting notice to the potential weakness in the Security Council voting procedure, lightly passing it off on the grounds the Charter does not anticipate the application of sanctions against any of the "Big Five" which possess the "veto" power.

We are slowly awakening to the fact that in the immediate future only members of the United Nations possess the power to threaten the peace and security of the world and that only the major powers can make a conflict universal. Dolivet may feel secure in a system he admits is predicated "upon the morality and unity of the Big Powers," but historical precedent warns against the instability of alliances. The writer cannot share Dolivet's apparent satisfaction with the Charter nor can he enthusiastically endorse an appraisal of the UN which neglects the historical setting, especially the experience of the League of Nations and the advent of total atomic war which makes the task of the UN immeasurably greater than the task of the League of Nations.

KLINE R. SWYGARD

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Robinson, Francis P., *Effective Study*, New York: Harper & Brothers, 1946, Pp. 262.

If you want a new experience in teaching a study-skills technique or a how-to-study course, then *Effective Study* will please you. Mr. Robinson has worked with the how-to-study program at Ohio State University for a number of years and it was as a result of many studies and of working with many students on remedial programs that this book was written.

Part of the material presented in *Effective Study* was first presented in *Diagnostic and Remedial Techniques for Effective Study* (Harper, 1941).

This new edition introduces a new idea in how-to-study work; namely, higher-level work skills.

This book is divided into three parts: (1) higher-level work skills; (2) educational deficiencies affecting school work; (3) problem areas indirectly affecting effective study. In addition to these three sections Appendix I is made up of diagnostic tests which include reading rate and comprehension accuracy tests; special reading skills—tables, charts, maps and formulæ; English survey tests—grammar, capitalization, punctuation, and sentence structure; and spelling. Appendix II contains keys which can be used by the student to check his work. There are charts and tables in the book to reveal to him how he compares with other students.

The section of the book devoted to higher-level work skills discusses skills in attack and concentration, skills in preparing reports, and skills in the classroom. Three sources of cues in course material in textbooks, in class, and in previous quizzes are emphasized and discussed. The "Survey Q₃R Method of Studying" is a new way of presenting how-to-study in a usable form. "Preparing for Examinations" and the "Timing of Reviews" are topics which give many helpful suggestions for writing a better examination and for saving time.

Throughout the book are (1) check sheets, (2) questionnaires concerning study habits and study conditions, (3) time schedule blanks, (4) evaluation sheets of study conditions, of plans for correction, and of classroom behavior. There are also a problem check list, and a personal data sheet.

Educational deficiencies affecting school work are discussed in Part Two. It is possible for a student to make a survey of basic skills in order to determine in which area, if any, he needs help. The tests in Appendix I are referred to by pages as they are needed. After each diagnostic test the student makes a self-evaluation and then follows through with a program for improvement.

Problem areas indirectly affecting effective study are discussed in Part Three. Students may work inefficiently in college (1) because of poor health, (2) because they worry over what vocation to prepare for or because they are poorly motivated without a definite vocational goal, (3) because of improper social adjustment, or (4) because of a personal problem. These areas are discussed in detail. The final chapter emphasizes the importance of making an inventory of progress and a plan for further improvement.

The author emphasizes that:

"It is not possible to make all individuals equally good students, but a training program can be set up to show each student how to work to his full capacity. The responsibility of the college must go beyond merely providing educational offerings; it must include showing the student how to take full advantage of

his opportunities. This, in turn, will more than pay for itself by reducing the number of repeaters and by providing for more efficient progress in the classroom."

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Szigeti, Joseph, *With Strings Attached*, New York: Alfred A. Knopf, 1947. Pp. 341 + xiii.

Max Pauer, the pianist, said that after he heard young Yehudi Menuhin, some sixteen or seventeen years ago, play the Mendelssohn and the Beethoven Concerti in the Leipzig Gewandhaus, he asked the violinist, "Mr. Menuhin, how do you do it?" To which Menuhin answered, "The notes are all written out, and I play them."

It was an attractive answer, of course, but it was hardly a good one. It takes more than not monkeying with a composer's score to make a great violinist. How much more it takes, not very many of us are apt to guess. What a concert artist must do, what he must experience, how he must learn, all that goes toward great musicianship, will perhaps never be quite clear to the layman, even to the musically intelligent layman. Apparently it is not clear to a good many people who hope to become concert artists, either; or if it is, they do not show suitable results of their understanding.

Musicians have a reputation for being very odd people, but as a rule it is only the little ones who are. Perhaps they try to make up in oddity what they lack in musical ability, or perhaps they are just naturally queer; however it may be with them, the first rate artist is apt to be an urbane, gracious, exceedingly busy person who has no time for foolishness. Not but what he can relax and enjoy life when he has a free hour; his relaxation, however, is apt to be delightful and also instructive to his companions at the time. A concert artist who has spent many years in travel about the world, and who has met all sorts and conditions of men under all kinds of circumstances, has had opportunity to learn a good deal more than most of us. How much a first rate artist may learn, and how well he may share it, and how affable he may be in the sharing, we can find in Joseph Szigeti's book of reminiscences and reflections.

Just how high Joseph Szigeti stands among his professional peers one can judge by the number of musicians, and violinists especially, who claim him as "their violinist." He has a reputation of being a "musician's musician," but at the same time he is one of the most popular of violinists. He may seem austere to some audiences, or parts of audiences, but that

is because he will not compromise. He builds his programs according to his own (very exacting) ideas of musical propriety, and he will not play with *schmalz*. He is more desirous of doing complete justice to the music he plays than he is of putting himself forward. He is, as one of his critics once said, a musician of utter probity. His popularity is that of the scrupulous interpreter, not that of the actor.

That, no doubt, is one reason that he is able to look back on forty years of devotion to music with the satisfaction of knowing he has done his best, and that his best is the best of all. And as he looks back he has a story to tell that is full of incident, full of fascinating people, and full of very shrewd criticism and advice.

He has known, of course, all the composers and performing artists of this century, and has known them well. He has given concerts and recitals round the world; and he has always been asked to return to those countries and cities where he has played—except by the Nazis, of course. He has watched the development of the present state of the world for forty years from all points of the globe. And he has met his share of frauds, stuffed shirts, brass hats, and unadorned fools.

Out of his experience he has written a wise book, but one that reflects his wisdom indirectly, with the charm and urbanity of his conversation. He has shown himself from the beginning, a violinist without schooling, a Hungarian boy without knowledge of other languages except German, an uneducated prodigy. That is a pretty heavy load for a youngster to carry; but Szigeti not only carried it, he made capital of it. He learned languages, he learned how men and women do and think, he learned by reading, listening, meeting people who could enlighten him. His musicianship is beyond criticism; and this book shows that his wisdom is greatly to be reckoned with.

Not that, like some artists, he feels that he has the solution to human problems. Only that he appreciates those problems: and that is more wisdom than most of us acquire. When, however, he turns to problems of music, he states them so clearly, and discusses them so carefully and yet so charmingly, that he makes them intelligible even to laymen who read what he has written. There is the question of violin tone, for instance, that bugbear of so many of us who would like a little more attention paid to music and less to the fiddle. What Szigeti thinks we already know if we have heard him play; but what he has to say in comment is enlightening, and never irritating. His urbanity is far more effective than any blunt criticism might be.

One would very much like to know how Mr. Szigeti, who never went to school to amount to anything, and is writing in a foreign language, can make his points so ineluctable! It is something of an education to read this kind of comment, not only because it is the great artist talking of his art, but because it is such amazingly fine talk!

There is education for musicians, and especially for violinists, all through the book. The matter of program-building, for instance, is important to any artist; what Szigeti has done, and his determination to make his own programs, make stimulating as well as informing reading. He has been criticized for playing too much modern music, for having unconventional ideas—such as inviting other artists to appear with him for one number on a recital program. Here we have a most agreeable *apologia* for his way of living and doing, an account that ought to be of great help to future artists.

There are interesting passages about composers, and even more interesting ones about editors and interpreters. Through it all is the deep and touching, the affectionate respect of one great artist for another. Especially when he speaks of other violinists does Szigeti show how much he reveres and honors his peers.

One can take for granted that when Szigeti speaks of music, of playing the violin, of concert experience, he is speaking with highest authority. What is not to be taken for granted, but is nevertheless quite clear, is his shrewd wisdom in observations on the world in which he lives and plays, and the men and women in it.

While *With Strings Attached* is a book that every conservatory, every department of music, every music teacher is going to have to have, it is likewise a book that all of us can read with enjoyment and a great deal of profit. Here is a very great musician who is also a very wise and charming man, able to converse with us on all manner of topics, largely by no means overwhelmingly musical topics, and to share with us enjoyment and understanding. Here is an artist of the very first rank who is quite capable of discussing his art.

Above all, *With Strings Attached* is interesting. It is good talk, well put together. It is something to turn back to.

Incidentally, it is something worthy of a good deal better proofreading than Mr. Knopf gave it.

S.A.N.

Peterson, Houston, *Great Teachers*, New Brunswick: Rutgers University Press, 1946. Pp. 351.

Few who have had an educational experience with teachers cannot point with inner satisfaction to one who has left an indelible imprint upon their lives. Out of encouragement and embarrassment, praise and criticism, come the profiles of teachers whom the editor has included in this interesting volume. Certainly not all great teachers are included and probably not all of those included were really great, but greatness is measured by variable standards and the author does not contend that his is a master list.

Twenty-eight teachers from Emerson to Dewey offer the reader a variety of settings and talents. Included are musicians, artists, lecturers, authors, scientists, researchers, and those who only taught.

This book should be read by all who were taught by any whose names are included in the Table of Contents. It is recommended to others who believe that teaching is a high calling and that only time will recognize the inspiring acts and methods of the successful teacher.

Of particular interest to teachers and former students are the references to the peculiarities and methods of many whose names are emblazoned across the doorway of the teaching profession. Garman, the mystic of Amherst, attained no academic prominence, published no books, and yet was described by William James as "the greatest teacher." Of him another said, "no educational force in his generation was more widely felt and less known to fame." A beautifully written essay on the Princeton Schoolmaster by Alfred Pearce Dennis describes the dignity and assurance with which Professor Woodrow Wilson presided over his classes and his genius for the spoken and the written word. George Lincoln "Poppy" Burr known to every Cornellian of the past quarter century inspired thousands to continue the study of history and with simple words encouraged the superior to become historians. His love for books and his correspondence with David Starr Jordan give evidence of those characteristics that distinguish him as one of the teachers of this century. The famous philosopher John Dewey, who had written so much on "Interest in Education," at first hearing in the lecture room sounded quite uninteresting. After a while, students learned that to attend his lectures was to participate in the actual business of thought. In his lectures one had to be scrupulously attentive and learn that his pauses were delays in creative thinking. Then there is "old Freddie Turner" at Wisconsin about whom a student said when asked what he taught, "it doesn't matter what he teaches, the subject I mean. It's what he is, the personality, and all that sort of thing. I don't remember much American history, but I'll never forget that man Turner, old Freddie Turner." He, like "Poppy" Burr, identified the promising researcher, gave him encouragement, and sent him on his way rejoicing. Of course no book on Great Teachers would be complete without a goodly space devoted to Professor Kittredge (Kitty) of Harvard. Professor Sherman's lively and penetrating analysis of this Shakespearean scholar tells of his sharp spontaneous humor, his derision of the unprepared, and his disregard for conformance.

These are but a few of the interesting profiles. Of course there are some uninteresting chapters and biographies of unknowns of doubtful stature for inclusion in the volume. Probably Lizzy Moore, except that she was the teacher of James Crabtree, would have been a forgotten teacher. The setting of her school, the weekly routine, and the materials used

recall, however, one-room school experiences that are precious to many.

This is the kind of book one can turn to time and again for source material, inspiration, and recollection. It will be inspiring for those who want to teach well and it might be helpful for those who unknowingly teach poorly.

MILLARD E. GLADFELTER
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Hughes, Raymond M., and Lancelot. William H., *Education—America's Magic*, Ames, Iowa: Iowa State College Press, 1946. Pp. 189.

The task of accurately evaluating state school efficiency is complex and difficult. Even though the task is difficult, people are continually asking the question: "How do we as a state compare in education with other states?" It is a healthy attitude for people to take. By questioning our place in the great educational program of the nation, we will continue to grow.

Just how to define educational efficiency is a common question. Many attempts have been made with various techniques. Some have compared school systems by evaluating State School Surveys, some by State-Wide Achievement Testing Programs, and others by statistical analyses of State School Systems. Several indexes have been developed. Some of the more important studies were made by Leonard P. Ayers in 1912 and in 1920. Frank M. Phillips, U. S. Office of Education, in 1926, made two important adaptations of Ayer's index. Others who have worked on indexes are Schrammel, Frazier, Harrell, Thompson, Grimm, Combs, Wiley, and Brown. The National Education Association made a study which is recorded in its Research Bulletin, Volume X, No. 3, May 1932, entitled, "Estimating State School Efficiency."

Mr. Hughes and Mr. Lancelot have used the following items to rank the states: (1) Accomplishment in education; (2) Ability to support education; (3) The degree in which their accomplishment is commensurate with their ability; (4) The degree of effort of the states to provide for education; (5) The efficiency of their educational effort; (6) The educational level of the adult population.

They have considered "educational accomplishment" the most important factor. "Accomplishment" is taken as the average of educational achievement at five levels: (1) Completion of eighth grade; (2) High school enrollment; (3) High school graduation; (4) College enrollment; (5) College graduation. "Accomplishment", as so measured for all the states, varies from 94.4 per cent for Utah and 88.9 per cent for Oregon to 38.7 per cent for Arkansas and 37 per cent for Mississippi.

"Ability to support education" is based upon the respective incomes

per child of school age in each state. There is a great range in this item—New York State with an income of \$4,320 per child 5 to 17 years of age, to Mississippi with an income of \$673 per child.

The authors have worked out a unique method of determining "accomplishment in relation to ability". They plotted the percentage accomplishment and the income per child. The relationship was found to be curvilinear. The curve which best fitted the distribution was determined statistically. The degree in which accomplishment is commensurate with ability for any state was measured by the deviation of the performance of the state from the curve. Utah, Kansas, and Nebraska ranked highest in this item, and Florida, Delaware, and Maryland ranked lowest.

The percentage of income devoted to educational purposes in each state is regarded as the "degree of effort". South Dakota ranks first with a 6.4 percentage of their income spent on all education, public and private; while Delaware ranks last with 2.44 per cent.

The "efficiency of the states" was determined by plotting the "educational accomplishment" expressed as a percentage and the expenditure per child for each state. The average curve of accomplishment relative to expenditures was constructed. Then the efficiency of each state was measured by the percentage of deviation of the point indicating its performance above and below the curve. Utah, with a deviation of a plus 24 is highest in rank, while New Jersey, with a deviation of a minus 18.5, is the lowest.

The last item in the study was "educational level of adult population". The data were taken from the Census of 1940. The states were ranked on the average number of years of school completed by persons twenty-five years of age or older. Utah stands first in the rank order with an average of 9.37 years of schooling for each adult twenty-five years of age or older. Arkansas ranks last with 5.58 years of schooling. The authors show that education of persons of twenty-five years or more is relatively low in industrial states. They point out that this is due in part to the large number of adults who move from states with low educational accomplishments to the large industrial areas, also from the fact that large industrial areas have a low reproductive rate and thus fail to maintain their populations.

In making an all-around rank of the states, five items were used: (1) Educational accomplishment with a weighting of 2; (2) Degree of accomplishment commensurate with ability; (3) Degree of effort; (4) Efficiency of effort; and (5) Education of adults. Items 2, 3, 4, and 5 have a weighting of 1. In this all-around ranking, Utah, Kansas, and Oregon stand at the top. Delaware, Maryland, and Georgia stand at the bottom of the list.

In the second part of the book the authors have dealt with "Vital Educational Problems of America". They have shown the effect of inter-state

migration upon the educational standing of the various states. They have also shown the effect the negro problem has had educationally upon the Southern States and in states to which negroes have migrated. The authors have brought forcefully to the readers' minds the need for Federal aid for education. They have also indicated the year-by-year basis on which the Federal Government should aid the various states.

An interesting chapter deals with a classification of the people who are to be educated in the United States. They point out that the future leaders of the nation will be found among the "creative thinkers", and they outline three important functions of the college: (1) To develop worthy motives, ideals, and ambitions; (2) To furnish the minds of students with useful knowledge; (3) To teach students how to think.

The influence education has had upon women during the past century and its effect upon the nation in the future is well treated. The suggestions made are worthy of serious consideration.

In pointing out the rapid growth of the public junior college in the United States and the great future for this American institution in the education of the great masses of people, the authors have shown an insight into the technical problems on the junior college level.

The chapter on "Guidance" written by John L. Holmes, Director of Testing Bureau, Iowa State College, deals with the guidance program in grades one to twelve only. The chapter would have been more complete had the authors gone on through the guidance program of the university and colleges. Guidance is just as important in the college and university as it is in elementary and secondary education, if not more so.

Mr. Hughes and Mr. Lancelot have not been satisfied with education in the United States, but have ended their valuable contribution to education by making a survey of education in other nations. The authors are to be complimented on their contribution to educational analysis.

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In the Journals

J. A. A.

Higher Education and Labor Relations, Shank, Donald J., *The Educational Record*, October, 1946, pp. 412-421.

This article points out the "growing significance of industrial and labor relations as a field of study for colleges and universities in the United States. The movement is not, and cannot be considered, an educational fad. It is a field too difficult and too controversial to be well adapted to the game of 'follow the leader'. It is an area which demands and merits the best educational planning and statesmanship which the nation has to offer. . . ."

While the new School of Industrial and Labor Relations at Cornell University is examined and discussed at some length in this article, such enterprises are not especially new in American universities and mention is made of some fourteen other institutions which are doing work in this field, including Harvard, Pennsylvania, Massachusetts Institute of Technology, California Institute of Technology, Wisconsin, North Carolina, and Pennsylvania State.

The curriculum at Cornell has been worked out "in cooperation with state leaders of government, labor, and management as a broad program in the social sciences. Ninety-seven hours of the 120 hours required for the degree, Bachelor of Science in Industrial and Labor Relations, are prescribed. During the first two years the student takes a heavy dose of the social sciences—American history, sociology, social psychology, economics, law, American government, labor economics. He also improves his communications skills by year courses in English and public speaking. He takes a special one-term course in accounting, which emphasizes the interpretation of financial statements. He has an opportunity to observe workers on their jobs in a required field course. With the exception of an orientation course and the courses in labor economics, foundations of law, and workers and jobs, all of the courses are those of other faculties, chiefly of arts and sciences. The prescribed program, at present, does not include any foreign language or any science. The only formal mathematical training is accounting and statistics.

"The technical and professional core of the program is given in the junior and senior years. In the junior year every student takes a course in business organization and management and a course in corporation finance. Every student takes a year course in the history of labor and labor-union organization and management. In addition to one year of statistics, there are required courses at the junior level in human relations in industry and administration.

"In the senior year, a year's course in collective bargaining, mediation, and arbitration and a year's course in personnel management are supplemented with special one-term courses in legal and constitutional aspects of labor problems and social insurance, in social security, and in public relations. During the last semester in school, all students study in a special laboratory in industrial and labor relations where actual office and conference situations are set up.

"Although most of the advanced work is offered by the teaching staff of the School, certain courses are given by the College of Engineering and the School of Business and Public Administration.

"Persons who have had little direct contact with industrial and labor relations will be surprised at the substantial literature which has developed in recent years in this field. In addition to comprehensive studies in economics, political science, psychology, sociology, and anthropology, there is a great wealth of material in the contracts which have been negotiated by thousands of unions and companies throughout the country. . . ."

No one believes, says this writer, that all the solutions to the problems of industrial and labor relations can be worked out in the classroom, but the School does believe "that its students will go into government service, into labor unions, and into industrial and personnel offices within corporations with a better understanding of the rights and responsibilities of all parties in industrial relations. It believes that the people who complete the program of the School will have a more comprehensive and useful background and knowledge of social problems and social issues than those who have worked in this field heretofore. It believes that there will be a growing demand for men and women with this type of training".

The Role of University Departments of Education in the Preparation of School Administrators, Tyler, Ralph W., *The School Review*, October, 1946, pp. 451-461.

Dr. Tyler, in this address given at a conference for administrative officers, examines the stages of development in the preparation of school administrators by university departments of education. "The first stage was a trial and error period in which problems that arose either were solved largely on the basis of hunch and good luck or were not solved at all. The second stage was the one in which the practices and experiences of school administrators were collected and classified to serve as a body of "best practices". This stage is an obvious improvement over the first, but the use of pooled judgments about "best practices" is not an adequate substitute for tested knowledge and consistent criteria in guiding action. The third stage, the one now characteristic of the more advanced segment of the profession, is one in which coherent theories of administration are

being developed and hypotheses are being tested by more rigorous objective evidence from experience and experiment. . . ."

"It is time," says Dr. Tyler, "for significant experimentation in the education of school administrators. The postwar period provides an unparalleled opportunity for the improvement of American education. In any effort for improvement, the school administrator is a crucial figure. His is a broad and complex job. He requires broader training, greater vision, increased competence. The only practical solution to the problem of training for such a complex profession is to use every available resource. If the department of education is to make a maximum contribution to the training of school administrators, it must be through the coordination of job experience and of education provided by various university departments and by the offering of more relevant training in the field of education itself. Accomplishing this task is a challenge to university departments of education".

Educating Students from Other Lands, W. Virgil Nestrick, *Phi Delta Kappan*, February, 1947, pp. 253-254.

What should American colleges do about students from foreign countries? Faced with overcrowded classrooms and the necessity of turning away some of our own young people, the temptation to limit the number of foreign students is strong. This article tells what is being done for the foreign students at Queens College, Flushing, New York.

"Over night the United States has become the center of the world. Over twelve thousand students from all parts of the world are enrolled in our colleges and universities from coast to coast. Several thousand more young men and women eagerly await the time when they, too, may come to this country to study in our colleges and universities.

"Students from foreign lands must continue their education in order that they may acquire those knowledges and skills which they should possess if they are to provide the constructive leadership their native countries and the world need. Many of the present students are here because the colleges they normally would have attended were destroyed in the War or are located in countries which have neither food nor housing to accommodate them at the present time. Some of the students are from countries which do not have adequate educational facilities for their youth.

"The United States has attracted many students because of its prominence in the World of Nations. Students from foreign lands have heard of and admire our industrial efficiency and our technological achievements. They marvel at our standard of living. They are here to learn firsthand how we accomplish what we accomplish. They are here to learn why we believe what we believe and why we act as we act. In short, they are

here to learn all they can about America and Americans. But while learning about us, they are here also as goodwill ambassadors and in this role they hope that we may learn more about them and their countries and understand the problems with which their countries are confronted.

"The present influx of students from foreign lands provides an opportunity for our youth and that of other countries to meet, exchange ideas, and learn from each other. This learning situation should contribute immeasurably to better international understanding and world cooperation, for it is through the youth of today that we may look with hope toward the future.

"Most of our visiting students will return to their native countries, taking back with them any influence which we may have had on their ways of acting and thinking. American colleges and universities, therefore, together with the residents of the cities in which these institutions are located, may very well be in the position of shaping the destinies of mankind the world over for many years. For this reason, it is important that we encourage students from foreign lands to come to the United States to study and take whatever steps are necessary to provide them with the type of educational program which will be of benefit to them, to us, and to the world.

"In these times, when our colleges are faced with unprecedented enrollments, the temptation to limit the number of foreign students is strong. Colleges and universities may find it difficult to admit students from foreign lands when so many of our own young people who wish to continue their education are turned away. It is fortunate, however, that most colleges have devised plans whereby foreign students, in greater number, can be admitted.

"If we are to encourage students from foreign lands to seek admission to our colleges and universities, we must accept responsibility for arranging programs which will meet their special needs and purposes. Provision must be made for meeting emotional and social needs, as well as for intellectual interests. If they are handicapped because of the lack of English, we must provide a program which will remove that handicap. If they are insecure in their new surroundings, we must plan a program which will help orient them to our ways of living. If they are insecure and lonely because they have no friends, we must provide a program which will help them make friends."

Queens College provides special facilities in reading and orientation, with classwork and extra-curricular activities, opportunities to meet and make friends with Americans, to live in their homes, and to visit museums, libraries, industries, hospitals, and places of historical significance. One group even assisted in harvesting crops. Religious and professional organizations assist in this program.

Report on UNESCO, William G. Carr, Phi Delta Kappan, February, 1947, pp. 257-260.

This is a report on the November meeting in Paris of the United Nations Educational, Scientific and Cultural Organization. The meetings were held at the Sorbonne. Dr. Carr outlines five projects which UNESCO will undertake:

"First, UNESCO will make an international study of methods of teaching international understanding in the elementary and secondary schools and in the higher institutions. The inclusion of the elementary and secondary schools, I assure you represents a substantial gain.

"Second, UNESCO will launch at once a major undertaking in the field of textbook revision. It will ask each member government to supply copies of its most commonly-used textbooks in history, civics, geography, and other subjects related to international understanding. These textbooks will be studied by an international committee of experts—historians and other persons competent to pass upon their accuracy and freedom from bias. A report will be made one year from now to the Second General Conference of UNESCO on what the staff finds, or doesn't find, in these textbooks.

"The staff is directed not only to bring to light good examples of materials which promote international understanding but it also has the responsibility of reporting to the General Conference any instances that it might find, which, in its judgment, are inimical to the maintenance of peace and security. That last responsibility, of course, will have to be handled with great tact. It is a step that ought to be taken only as a last resort. The whole weight of the UNESCO program will be on the discovery and development of good teaching materials, rather than on the condemnation of bad material. However, it is important to know that UNESCO has authority, if need arises, to point out to the entire world through its General Conference, which is open to the press of the world, any instances of what might become, for instance, another Nazi educational system.

"Third, UNESCO will establish, in cooperation with the World Health Organization, an expert committee on health education to organize the best experience of all countries for the development of healthy boys and girls through school health instruction.

"Fourth, UNESCO will attack the great world-wide problem of illiteracy. It is estimated that between fifty and sixty per cent of the adults of the world are now unable to read and write even the simplest materials in their own language. UNESCO will set up a panel of experts, drawn from countries which have recently had successful programs for the eradication of illiteracy.

"This project is called 'Fundamental Education.' Fundamental education means, in UNESCO language, basic literacy, as we would ordinarily use the words, plus some health education and some education in community and economic understanding. 'Fundamental Education' is broader than just the removal of illiteracy.

"Fifth, UNESCO will in 1947 develop a world charter for the teaching profession. This statement will have to be approved by the various governments, but it will be a statement of what the governments of the world are willing to approve in terms of social rights and economic status of their teachers and the duties for which the teacher is responsible as a member of modern society."

In the Mail

J. A. A.

"The G.I.'s and the Colleges" is the title of booklet No. 4 in a series on aid to veterans published last summer by the Retraining and Reemployment Administration of the U. S. Department of Labor.

This report deals with the present bulge in college attendance, the records veterans are making, steps being taken by colleges to meet the emergency, and the community advisory centers for veterans.

In reply to the question, "How long will it last", this report says:

"It is generally agreed that the present bulge in college enrollment will last from three to five years. State and large city universities, state agricultural and technical colleges and teachers colleges incline toward an estimate of five years. Large private institutions and liberal arts colleges tend to estimate the bulge as lasting between two and four years. Liberal arts colleges, whose increased enrollment comes mainly from students seeking pre-professional training, believe their peak attendance will pass in two or three years. Thirty per cent of the liberal arts colleges believe their enrollment will drop within the next two years. Junior colleges expect a drop within the next two or three years, as students move on to professional and other higher training.

"State departments of education, state offices of veterans affairs and community advisory centers generally agree that the present bulge in enrollment will continue for three to five years".

Quoting chapter five in this report, "Looking Ahead":

"Many administrators believe that college and university enrollments will remain permanently above prewar levels. They point out that the demand for higher education increased steadily for more than 20 years before the war; that continued prosperity will help to maintain this rising trend and that G.I. interest in college and university training will probably arouse a new and more wide-spread interest in advanced studies."

West Virginia University states:

"If the demand for college education continues after this war as did the demand for high-school education after World War I (which is a possibility), it might be a permanent situation which would have to be met".

"It is the opinion of Oregon State College that: 'higher education is due for about the same boom that hit secondary schools nearly a generation ago'. The North Dakota School of Forestry states that: 'Millions of servicemen returned as confirmed advocates of higher education. Prewar enrollments will seem small compared to enrollments in the next 20 years'."

"In the opinion of the Teachers College of Connecticut at New Britain: '... the uses of college education, both for vocational and professional reasons, have been sufficiently publicized so that ... there will be an expansion of college education in this country similar to the expansion of secondary education after the last war'."

Fenn College states:

"It is (our) opinion that the demand for higher education for many years to come is likely to be at least 50 per cent greater than previous to the war. This opinion is based on the following factors: The war has caused large numbers of people to appreciate the advantages that come to those who have higher education. The advances in production processes in industry and the results of research in many fields will require better trained personnel in industry, business and other fields of work. Again, the increase in income of large numbers of families will make possible the use of more money for the higher education of their children".

"The following statement from Kansas State College summarizes the opinion of many educators:

"We expect 'permanent' demand to hold at about 50 per cent above pre-war levels for these reasons: (1) Some G.I.'s will be in school until about 1954-55. (2) The long-time trend toward an increasing percentage of college attendance will continue. (3) War stimulates this trend or seems to. (4) Wartime birth-rate increases will start reaching college as the last G.I. enrollees are finishing. (5) There will be increasing stress on making higher education available to those with limited funds".

"Various educators visualize the ex-G.I. influx onto college campuses and the present bulge in enrollments as having possible permanent effects on our system of higher education. Some administrators believe that the higher standards made possible by veteran students will be maintained. Others foresee a continued expansion in junior colleges, city universities and technical institutes and expect a further development of pre-professional curricula in junior and teachers colleges. They point out that this development is not a new trend, but they believe it will be accelerated by the present situation.

"A number of educators are becoming increasingly concerned with the question of what types of higher training will be available to prospective students who cannot meet the raised entrance requirements of colleges and universities. A few members of this group seem to feel that new forms of post-high-school instruction may have to be developed or old forms modified and expanded. One educator states the problem as follows:

"... there are increasing demands for education of a post-high-school level that cannot be classified directly as collegiate or academic in nature. To me it seems reasonable to expect that if provision is made for technical and what might be termed higher vocational education, if offered on a post-high-school level, the percentage of post-high-school graduates continuing their training might easily rise from a present 9-10 per cent to 20-25 per cent".

Copies of this publication are available, while the supply lasts, by addressing Editorial Extension Department, The Crowell-Collier Publishing Co., 250 Park Ave., New York 17, N.Y.

The American Council in September, 1946, issued a 113 page booklet on "Financial Assistance for College Students". It is No. 7 in series VI on student personnel work. Under the chairmanship of Russell T. Sharpe, the report briefly reviews the history of financial aid in higher institutions and points out the relationship of the problem to the broader aspects of educational policy.

Quoting the summary and conclusions of this very comprehensive report in full:

"This report was planned to bring into light the status of student aid practices and to suggest orderly procedure for them in the following manner:

"1. Centralization of administrative supervision within the college of all types of financial aids as a means of (a) avoiding duplication of aids, and (b) gathering together in one place information which would bear upon a student's financial plans.

"2. Establishment of a financial counseling program within the college built upon a recognition of the fact that each student presents a unique problem to be reviewed and acted upon in the light of his total adjustment to college or university life. This implies:

- a) A staff of trained counselors (also teachers adept in handling student personnel) who will advise each student how to finance his education and live on his income.
- b) Coordination of the financial aids program with other personnel agencies on and off the campus.
- c) Accuracy, honesty, and fairness in the dissemination of information about financial aids to prospective students and to the general public.
- d) Increase in number and amounts of financial aid, with emphasis upon increased contributions from the federal government.

"A program of financial assistance to students, such as that outlined above, is particularly necessary if there is truth in our assertion that present programs are largely inadequate. Emergency needs appear to be met, but there remains the huge problem of educating and, correlatively, of providing financial assistance for developing leadership and good citizenship in the postwar period. Happily, the needs of returning veterans are being met in large measure by provisions set forth in Public Laws 16 and 346. It is reasonable to assume, however, that these programs for veterans will have to be supplemented by other sources of aid. Also it is expected that many civilians who were engaged in immediate war work will return to

colleges and universities. A well-rounded financial aid program must encompass the needs of these various types of students.

"College and university administrators must realize that the problems of financial aid to students do not limit themselves to emergency periods. Changes brought about by the depression and the war have been constructive. War has brought new emphasis on need, but principles, techniques, and structures are fundamental problems to all in this postwar period. It is now that the real test of achievement will come. Hence, this study so far as it deals with the application of fundamental principles, structures, and techniques for the administration of loan, scholarship, and part-time employment programs is not confined to problems of the immediate period, but, with equal validity, will, we hope, serve as a guide in the years to come. Dislocations in the nation's economy demand the best possible use of existing aids, further examination of techniques in the administration of these aids, inquiry into the possibility of expansion of existing aids from private, institutional, and federal funds, and immediate action to meet the needs of these and future times. Only by doing so can the American college discharge one of its major obligations to democracy".

"Going to College" is the title of a small handbook on requirements for admission to the University of California. Issued by the Alumni Association, it is written in a humorous vein and sketches the educational career of a mythical Boswell Pontoon, with appropriate line drawings depicting Boswell's early ambition in high school, his tendency to "coast along," and his final rejection by the university because he "didn't have the right grades in the right subjects." The booklet then points a moral, "If you're going on a trip it's a good idea to find out what trains and routes to take and what tickets to get," and ends with advice to Boswell about what he can still do to get into the university.

Cleverly written, this little handbook probably carries more counseling punch than most long dissertations on the subject and will be infinitely more widely read by the high school students and graduates to whom it is addressed.

Reported to Us

A. H. P.

Dr. K. P. R. Neville will retire as Registrar of the University of Western Ontario July 1, 1947. Miss Helen M. Allison has been appointed to succeed him as Registrar. She has been in the Registrar's Department of her Alma Mater since her graduation in 1924, except during 1940-41 when she attended the University of Minnesota and secured her M.A. degree in English. During that session she availed herself of the opportunity to observe and study the practices of the registrar's office in a large university, at that time under the supervision of Rodney M. West who was such a potent factor in the development of the American Association of Collegiate Registrars.

Mr. W. P. Shofstall, Dean of Administration of Stephens College, Columbia, Missouri, is taking two years' leave of absence for some additional work with the War Department in Germany. Mr. P. R. M. Armstrong is Registrar of Stephens College.

Missouri Valley College has appointed Russell DeLong, Director of Admissions and Public Relations.

Kenneth L. Heaton has been appointed Dean of Admission and Examinations, Boston University. He has been with the Civilian Personnel and Training Division of the Office of the Secretary of War.

New appointments at the University of New Mexico include Daryle Keefer, Director of Admissions.

Judson Martin has been appointed Registrar of State Teachers College, Bemidji, Minnesota.

Miss Stella Morris has been appointed Registrar of Colorado A. & M. College. Mr. Ferguson is Director of Admissions.

Mr. Phillip I. Peters has been named Registrar of Union College, Barbourville, Kentucky, succeeding Mr. Frank Burgess.

Mr. Ellis A. Stebbins has resumed his former position as Business Manager of Oregon College of Education, and Mr. R. E. Lieuallen has succeeded him as Registrar.

Howard W. Stepp, Assistant Director of Athletics and swimming coach, has been appointed Acting Registrar at Princeton University to succeed Wilbur F. Kerr.

It is with regret that we announce the death of Arthur W. Tarbell, a former president of the American Association of Collegiate Registrars. Dean emeritus, Carnegie Institute of Technology, he died November 25 at the age of seventy-four years. Mr. Tarbell, a well-known author and lecturer, became Secretary to the President of the institute in 1908, served as Registrar (1909-19) and as Dean of Men (1919-38). He was the author of "The Story of Carnegie Tech" and "Cape Cod Ahoy" and at the time of his death was working on "I Retire to Florida" and a history of the town of Chatham (Mass.).

In 1910, Mr. Tarbell was one of seventeen who attended the meeting of registrars which resulted in the formation of the American Association of Collegiate Registrars. He was an active member of the Association during the years he was a registrar, and served as Vice-President in 1917-18 and as President in 1919-20.

"F. Taylor Jones, Registrar of Drew University, Madison, New Jersey, has joined the staff of the American Council on Education in Washington during a six-month sabbatical leave of absence. He is administrative assistant with the Council's new Advisory Service on Student Personnel work. Walter A. Glass, Assistant Registrar, is in charge of the Dean's office during Mr. Jones' absence."

Colonel Robert Boehm Riordan, Registrar, University of Notre Dame from 1930-41, died December 4 of a rare tropical disease incurred while on duty in the Pacific war zone last year.

Harvard College will discontinue awarding the S.B. degree and grant only the A.B. degree effective with the class entering in 1947. The candidate for admission must present three years of Latin (or two of Greek) or a third year of secondary-school mathematics. Although the A.B. degree has been granted at Harvard since 1642, the S.B. is a recent development "and has been the object of widespread criticism." First granted in 1907, it was only nominally a scientific degree, and recent experience has shown that most undergraduates, even those majoring in scientific fields, prefer the Arts degree.

The School of Home Economics of Ohio State University celebrated its golden anniversary in November. In attendance was Mrs. Perla Gibbs who opened the school in the autumn of 1896 with one class.

Leo. M. Chamberlain, formerly Dean and Registrar, University of Kentucky, became Vice-President of that institution in December. *THE JOURNAL*, of which he served as Editor in 1941-42, rejoices at his promotion but regrets his consequent withdrawal from the Board of Editors. He will be succeeded as Associate Editor by John E. Fellows of the University of Oklahoma.

Verna Lower, formerly Registrar, Mt. Union College, Alliance, Ohio, is now Registrar of the Canton Division of Kent State University (Ohio), with the title of Assistant Registrar of Kent State University.

Ohio State University has appointed a director of a new service to handle all student-loan responsibilities.

Rockford College and Beloit College, both founded by the same Congregational and Presbyterian clergy and laymen, joined in celebration of their centennials.

The U. S. Merchant Marine Academy has recently been authorized to confer the degree of bachelor of science. Authority to confer the degree of bachelor of science was granted in 1933 to the U. S. Naval Academy, the U. S. Military Academy and the U. S. Coast Guard Academy.

Vassar College has appointed its first woman president, Sarah Gibson Blanding.

Wake Forest College, located for 112 years at Wake Forest, North Carolina, will be moved to Winston-Salem within the next five years. The college has accepted a trust fund of 12 million dollars from the Z. Smith Reynolds Trust Fund and land in Winston-Salem for a new site for the College, with an estimated value of a million dollars. Tentative plans call for the sale of the present plant.

The psychological laboratory, Wesleyan University, Middletown, Connecticut, one of the first in the country, celebrated its 50th anniversary in December, 1946.

Louise Robinson Heath, Ph.D., Head of the Department of Philosophy and Psychology at Hood College, Frederick, Maryland, has been appointed Academic Dean of Keuka College, Keuka Park, New York. She will take up her duties in July.

The first secular American university under Jewish auspices will open next fall. Named after Louis D. Brandeis, late Justice of the U. S. Supreme Court, Brandeis University will take over the charter of Middlesex University, together with its campus and buildings in Waltham, Massachusetts.

Columbia University has created a new school, the "School of General Studies," to provide instruction for qualified students who, because of hours of employment or for other reasons, are unable to attend other schools of the university. Those who meet the academic requirements will be candidates for the degree of Bachelor of Science in General Studies. Graduate students also may take part of their program for the masters' degree in the new school. Columbia University will now have three groups of undergraduate students, Columbia College, Barnard College and the School of General Studies.

Rhodes Scholarships, discontinued in 1938 because of the war, are being awarded this year. These awards were first made in 1904, and were established under the will of Cecil John Rhodes, South African financier and statesman to "bring about peace, enlightenment and human uplift."

A record number of 48 awards will be given to outstanding students in United States colleges and universities this year. The selection will be made from 850 applicants. Since 1904, 1126 students representing 211 American Colleges have attended the University of Oxford, England, as Rhodes scholars.

The Rhodes Scholarship stipend is approximately \$1,600 a year. It normally is awarded for two years, but may be held for three, if a definite plan of study acceptable to the trustees is presented.

Qualifications before the war were that a candidate must be an unmarried male citizen, must have passed his nineteenth birthday but not his twenty-fifth, and must have completed at least his sophomore year at some recognized degree-granting American college or university. However, this year men engaged in any kind of war effort will be considered with age restrictions waived. They also may be married. Dr. Frank Aydelotte, Director of the Institute for Advanced Study at Princeton is American Secretary for the Rhodes trustees.

The College Entrance Examination Board will offer tests in Greek and Italian in April, 1948.

The College Entrance Examination Board, working with the co-operation of the Department of State, will have ready for distribution in the

Spring of 1947, the English test for Foreign Students. Through special arrangements with the Department of State, this test will be administered at overseas centers to foreign students who wish to study in the United States, and scores will be made available to colleges and universities to which the students apply for admission. One form of the examination will be prepared for the use of board member colleges which feel a need for supplementary testing of students who have come to this country without taking the examination.

The Occupational Index, Inc., edited by Professor Robert Hoppock, School of Education, New York University, has published 10 occupational abstracts giving an over-all view of the work of the occupations, with essential information on the nature of the work, earnings, qualifications, future prospects, and other aspects of the career.

The Occupational Index, a continuous bibliography on occupations, was established in 1936 by the National Occupational Conference, under a grant from the Carnegie Foundation of New York to promote the advancement and diffusion of knowledge about occupations. In connection with the Index monthly abstracts are issued summarizing the literature on occupations.

A complete list of titles may be obtained from Professor Hoppock. Annual subscriptions to the Index, published quarterly, and to the yearly list of ten Occupational Abstracts are also available.

A new quarterly, the *Journal of General Education*, Department of Publication, State University of Iowa (\$2.00 per year) is designed to provide an outlet for discussions of the issues and experiments of general education. The editor is Earl J. McGrath.

The Michigan College Association has extended an agreement in force for 8 years exempting 55 accredited Michigan high schools from the usual sequence requirements for college admission. Other accredited high schools may be added to the list.

A search is being conducted by the Rural Editorial Service of the University of Chicago to locate school systems staffed with satisfied teachers. It is hoped that a number of rural and urban systems may be discovered where teachers generally feel that salaries are fair, their work is appreciated, working conditions permit effective instruction and teachers have opportunities for recognition and leadership.

A comprehensive study of the question of whether veterans make better college students than non-veterans has been undertaken by the Carnegie

Foundation for the Advancement of Teaching and Carnegie Corporation of New York.

Numerous factors will be considered in relation to academic performance, including military experience prior to college, the increased age of students, the married status of many students, and most important, the federal subsidy removing or at least reducing economic barriers which have served to limit admission of able students in the past.

The College Entrance Examination Board will conduct the study. Approximately a dozen colleges and universities throughout the country will be invited to participate in the project.

The Teachers Insurance and Annuity Association of America, a non-profit corporation organized in 1918 jointly by the Carnegie Foundation for the Advancement of Teaching and Carnegie Corporation of New York to provide more economic security for the college world, calls attention in its quarterly bulletin to the need for increased retirement benefits for teachers and other college personnel.

During the past year twenty-three colleges and universities with long-established retirement programs, have made revisions which are generally based on premium payments amounting to 15 per cent of salary, with the college and the staff member each contributing half; or with the college giving 10 per cent and participants paying 5 per cent. In the past, most plans were based on 10 per cent of salary, with matching contributions of 5 per cent from both college and participants.

A record number of 62 colleges, universities and other educational institutions established new retirement plans with T.I.A.A. during the past year. Although most of these new plans are of the traditional "10 per cent of salary" type many colleges are convinced this contribution level, established during the 1920's, is no longer adequate.

Failure to provide retirement coverage for non-academic employees is still a major weakness of many college retirement plans, for these employees, like all college personnel, are excluded from Federal Social Security. Although the trend is toward inclusion of non-academic employees in college retirement plans, only one out of every five of the plans started in 1946 included them.

The controversial issue of Federal aid for education will receive thorough consideration at the present session of Congress, for ten major bills designed to help schools and to raise teachers' salaries have already been introduced. Strong educational groups, led by the National Education Association, are directing the efforts to secure Federal funds.

Fundamentally there are only two concepts of how the Federal money should be allocated, (1) a grant-in-aid to every state on a per capita basis,

and (2) a grant on the basis of need, the poorer state to receive a larger share.

There is considerable opposition to Federal aid by those who fear Federal control of public education. Those favoring Federal aid hold that control need not necessarily follow, as is evidenced by numerous Federal aid education bills adopted in the past which have resulted in no interference by the Federal Government with State educational programs.

An Advisory Service on Student Personnel Work, announced in November 1946 by the American Council on Education to a selected list of its member institutions, has been received with a great deal of interest. The Advisory Service sends experienced consultants, on request, to four-year colleges and universities which want an over-all study of their personnel programs or analysis of particular phases of it, or are looking toward the inauguration of such work. The project is supported in part by a grant from the Hazen Foundation, which has long been interested in this field.

Increasing emphasis on personnel work among the colleges, brought on in part by present crowded and adjustment conditions, led the Council to establish the new service under the auspices of its standing Committee on Student Personnel Work. It is under the direction of a sub-committee headed by A. J. Brumbaugh, vice president of the Council, assisted by F. Taylor Jones, Registrar of Drew University, who is working with the Council during a sabbatical leave. The panel of consultants, drawn from some 25 institutions, includes some of the best-known experts in the field.

Limited funds and the availability of consultants have made it necessary for the Advisory Service to accept only a small number of applications for 1946-47 and 1947-48.

An Opinion Poll conducted by Dr. John Dale Russell, Director of Higher Education of the U. S. Office of Education concerning the number of qualified applicants who were unable to enter college because facilities were lacking, indicates that in most States any qualified student—veteran or non-veteran—could have obtained admission to college somewhere. Where there were serious limitations of facilities, the veterans were quite generally given preference over non-veterans. It is probably true that a considerable number of potential students have voluntarily remained out of college this year.

However, the quality of the educational experience for large numbers of college students in 1946-47 is below that offered in the prewar period. This conclusion is reinforced by two sets of facts: (1) The shift of emphasis to certain curricular areas has resulted in tremendous overcrowding in such fields as engineering and business administration; (2) qualified

instructors have been unwilling to accept teaching positions or to remain in them under unfavorable working conditions.

The study further indicates that the crucial period will really come in the autumns of 1947 and 1948 when large freshman and sophomore classes replace small senior and junior classes. By 1948 the strain will begin to be felt most severely on the instructional facilities, equipment, and faculty members for the more advanced levels of study, while the pressure, by reason of numbers in the lower division, will remain high and even continue to increase.

University of Oslo Features American Summer Session

Norway is one of the first European countries to launch a strong post-war educational program. Realizing its dependence on other countries it is encouraging foreign students to study in its universities during the summer.

The University of Oslo is offering a special six-weeks program for American students, during which time three courses may be studied for a total of six semester hours of credit. A General Survey of Norwegian Culture will be required of all students. Other courses are offered in geology, geography, biology, meteorology, and courses in the humanities emphasizing particularly Norwegian literature, history, music, and art.

The lectures will be in English, although students will have an opportunity to study Norwegian and do reading in that language if they wish.

Two hundred students will be accommodated in University dormitories and special accommodations will be provided for a limited number of married students. Carefully planned excursions are included in the program covering three week-ends. The term opens July 7 and closes on August 16. Applications are being handled by the Institute of International Education, 2 West 45th St., New York 19, N.Y. The cost of the program is surprisingly low including low cost transportation for those who desire it. An advisory council has been established for the program in this country including leaders from many fields of higher education.

It is to be hoped that many institutions in this country will follow Norway's example and establish similar programs for students from many foreign lands.

UNIVERSITY OF KENTUCKY BUREAU OF SOURCE MATERIALS IN HIGHER EDUCATION GRADUATE ASSISTANTSHIP AVAILABLE

To the Members of the American Association of Collegiate Registrars:

After ten years' work in building a research laboratory for graduate students in the field of education we are offering to share our experience

with others. The University of Kentucky has made provision for a graduate assistantship at \$100 a month. Application may be made for \$1,200 for the four quarters or for \$900 for the regular session of three quarters.

The objective of the course is to interest students in the organization and analysis of source material for the preservation of the history of our educational institutions and for the study of their problems in administration and instruction. The course work will be under the supervision of the graduate faculty in education with emphasis on the study of problems in administration and instruction. While the laboratory work of the graduate assistant will in the main consist of the organization and analysis of educational archives he will have the opportunity of working with the University Archivist in the general field.

The applicant must be a candidate for an advanced degree and be recommended by his own institution. With the statement of his undergraduate work he should send a picture and a brief biographical sketch.

We are asking the assistance of the registrars in interesting a satisfactory person or persons for this position and will appreciate any assistance you can give.

If additional information is desired apply to Mr. Ezra L. Gillis, Director Bureau of Source Materials in Higher Education.

The Twenty-seventh Annual Meeting of the American Association of Junior Colleges was held at Hotel Jefferson, St. Louis, Missouri, February 19 through 22, 1947. The Convention was characterized by enthusiasm and a great deal of professional activity as shown by important committee work. There were approximately 375 men and women in attendance, representing all sections of the United States. Significant papers were presented by a number of nationally known people. Some of the speeches will be reported in the *Junior College Journal*.

Five national committees carry on the major work of this Association: Curriculum and Adult Education; Teacher Preparation; Administrative Problems, including Public Relations; Student Personnel Problems; Legislative Problems. These committees carry on their investigations during the year and report at the annual meeting.

The newly elected president of the Association is Eugene S. Farley, Director of the Bucknell University Junior College of Wilkes-Barre, Pa. The new vice-president is Leland L. Medsker, who is Dean of Wright Junior College, Chicago. Jesse P. Bogue is executive secretary of the Association, with headquarters at 1201 19th St., N.W., Washington, D.C.

THE ASSOCIATION OF KENTUCKY REGISTRARS

The Association of Kentucky Registrars held its annual meeting on

November 29, 1946, at the Student Union Building at the University of Kentucky with the president, Dr. O. B. Dabney, Ashland Junior College, presiding. The general theme was Admission Problems.

Dinner was served at 6:00 P.M. at which time Dr. Raymond F. McLain, President, Transylvania College, discussed phases of the educational program of the occupational forces in the Pacific area. Guests at the dinner were Dr. Raymond F. McLain, Dr. C. C. Ross of the University of Kentucky and Dr. A. B. Crawford, Acting Chief, Vocational Rehabilitation and Education Section, Lexington.

The program consisted of short talks on the general theme, "Evaluation Showing the Correlation Between G.E.D. Tests and Any Standard Tests Given by Universities" was discussed by Dr. C. C. Ross. Mr. M. E. Mattox, Eastern State Teachers College, gave a paper on the "Uniformity of College Admissions." Dr. A. B. Crawford made a report on "The Veterans Administration's Viewpoint of College Admissions" and estimated how many veterans would apply for admission to colleges and universities in the near future. A general discussion of the theme followed. Dr. Ralph Hill of the University of Louisville gave a report on the meeting of the A.A.C.R. and recommended that each school should secure a subscription to the JOURNAL.

At the business session, the chairman of the nominating committee, Dean J. H. Hewlett of Centre College, gave the following report which was accepted by the Association: Mr. M. E. Mattox, Eastern Teachers College, President; Dr. Ralph E. Hill, University of Louisville, Vice-President; Miss Pearl Anderson, Transylvania College, Secretary-Treasurer. The meeting was adjourned.

EDITOR'S NOTE: The above report is from the notes of Miss Jessie Wilson, of the Registrar's Office at the University of Kentucky, and secretary-treasurer of the Kentucky Association. We regret to learn of Miss Wilson's death on February 5.

TENNESSEE ASSOCIATION OF COLLEGIATE REGISTRARS

The Tennessee Association of Collegiate Registrars met at the Hermitage Hotel in Nashville, Tennessee, on March 26 at 8:00 P.M.

Mr. J. Ridley Stroop, Registrar of David Lipscomb College, President of the Regional Association, presided.

Dr. R. F. Thomason, Registrar of the University of Tennessee, discussed *The Methods and Techniques Employed by the University of Tennessee in Handling the Problems of Admission and Credit Evaluation for G.I.s.*

Dr. W. H. Vaughn of Peabody College presented *The Plan and Accomplishment of the Kentucky Registrar's Association.*

The program concluded with a round-table discussion of other current problems of the Registrar's office.

This was the first meeting of the Tennessee Association of Collegiate Registrars since discontinuation due to war-time restrictions.

The Registrar's Office at the University of Illinois has been expanded since last July by the addition of two branch offices under the general supervision of the University Registrar. These were necessitated by the establishment of branches of the University in Chicago and Galesburg. In Chicago the University has taken over part of the Municipal Pier. At Galesburg the University is using the buildings of the Army's Mayo General Hospital, providing administrative, teaching, laboratory and recreational facilities, and staff and student housing. Both branches offer freshman and sophomore courses in liberal arts and sciences, commerce, and engineering. They began offering work last fall. The present enrollments are slightly over 4,000 at the Pier and slightly over 1,000 at Galesburg.

These two facilities did not become available to the University until last July. They had to be reconverted to University use, staffed, equipped, and ready to begin work in October. The branches of the Registrar's Office, however, had to be in operation in less than a month from the time the University obtained occupancy so that applications for admission could be received and processed. New staffs had to be recruited and given proper training. Fortunately it was possible to obtain the services of some persons who had had experience in admissions or other university administration, but there was much for the staffs to learn regarding admission requirements, records, and more general university procedures. All the people engaged for key positions at the branches came to Urbana and were given training. Members of the Registrar's Office staff at Urbana went to the branches and assisted in organizing the offices and instructed the staffs with reference to accreditation procedures, registration processes, record keeping, and University regulations. The University was fortunate in obtaining the services of some excellent people at both branches; otherwise the task would have been impossible. However, the period from last July until after the branches opened for instruction in October will be remembered by all concerned with the establishment of these branch offices as extremely hectic.

Mr. H. E. Temmer is in charge at the Pier and Mr. L. O. Kerwood at Galesburg. Both have the title of Examiner and Recorder. Their offices are now organized to give all the services expected of admissions and records offices. The successful establishment of these offices in such a brief space of time is due to the untiring efforts of these men and the nucleus of their present staffs who have been with them from the beginning.

Preliminary Program

Thirty-third Convention

AMERICAN ASSOCIATION OF COLLEGIATE REGISTRARS

APRIL 21, 22, 23, 24, 1947

Hotel Shirley-Savoy

DENVER, COLORADO

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Ralph E. Hill	University of Louisville

PROGRAM

Monday—April 21

- 1:30 P.M. Pre-convention sight-seeing tour of Denver
 7:30-10:30 P.M. Registration of delegates and guests
 8:30-10:30 P.M. Informal reception for delegates and guests

Tuesday—April 22

9:15 A.M.-12 NOON

S. WOODSON CANADA, University of Missouri, *presiding**Address of Welcome* by PRESIDENT ROBERT L. STEARNS, University of Colorado*Admission Procedures and Tests: Operation and Use of a Testing Program.* DAVID

H. DINGILIAN, Los Angeles Schools

Panel Discussion

RONALD B. THOMPSON, Ohio State University, Chairman

DAVID H. DINGILIAN, Los Angeles Schools

LLOYD W. CHAPIN, Georgia School of Technology

IRENE DAVIS, The Johns Hopkins University

W. C. POMEROY, University of California at Los Angeles

China's Universities in War and in Peace, MAURICE VOTAW, American Advisory Staff to Chinese Government. Registrar, St. John's University (Shanghai) on leave.

Discussion

Announcements

2:00-4:30 P.M.

MARJORIE M. CUTLER, University of Denver, *presiding**The Impact of International Relations on Higher Education*, DR. BEN M. CHERINGTON, University of Denver.*Teacher Shortages in Higher Education*, RAY C. MAUL, Registrar, Kansas State Teachers College, Emporia

Discussion, led by DOUGLAS V. MCCLANE, Registrar, Whitman College.

6:45 P.M.

ANNUAL DINNER—informal

Education for Man in a Day of Confusion, CANON BERNARD IDDINGS BELL, Consultant on Education to the Bishop of Chicago

Wednesday—April 23

9:15 A.M.-12 NOON

THE FORUM

ALFRED D. DONOVAN, Pratt Institute, *Director*

Topics:

A Plan of Co-operation between the U. S. Office of Education and the Association for making enrollment and other reports, JOHN DALE RUSSELL, Director, Division of Higher Education

Office Organization, RALPH E. PRATOR, Registrar, University of Colorado
Efficiency in Recording, CHARLES E. HARRELL, Assistant Registrar, Indiana University
Business Machines in Registration, ROBERT S. LINTON, Registrar, Michigan State College

The Official Transcript and High School Record, DONALD H. WINBIGLER, Registrar, Stanford University

Accreditation of Service Experiences, MRS. FLOYDINE D. MISCAMPBELL, American Council on Education

Counseling, J. R. SAGE, Iowa State College

The Question Box

BUSINESS SESSION

Report of the Committee on Nominations
 Election of Officers

2:00-6.00 P.M.

Trip through Denver's Mountain Parks

*Thursday—April 24*TRUE E. PETTENGILL, University of Minnesota, *presiding*

Coordinating the Administrative Offices, WILLIAM HAROLD COWLEY, Professor of Education, Stanford University

Discussion, led by STUART R. MCGOWAN, Dean and Registrar, Kenyon College

BUSINESS SESSION

Report of Committees and Officers
 New Business
 Introduction of the New President
 Adjournment

CONVENTION COMMITTEES

COMMITTEE ON INFORMATION

Merle S. Kuder, Chairman Western Washington College of Education
 Charles E. Maruth University of Denver
 Rebecca E. Tansil Maryland State College
 Douglass B. Clarke Sir George Williams College

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J. R. Sage, Chairman Iowa State College
 Joseph H. MacKinnon Massachusetts Institute of Technology
 Ira M. Smith University of Michigan
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 E. J. Mathews University of Texas

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Sister Susanne Marie	Fontbonne College
Worth A. Fletcher	Municipal University of Wichita

COMMITTEE ON LOCAL ARRANGEMENTS AND REGISTRATION

Ralph Prator, Chairman	University of Colorado
Marjorie M. Cutler	University of Denver
<i>Chairman, Sub-Committee—Hotel Arrangements</i>	
R. E. McWhinnie	University of Wyoming
<i>Chairman, Sub-Committee—Reception</i>	
R. M. Carson	Colorado State College of Education
<i>Chairman, Sub-Committee—Registration</i>	
Father Eugene H. Kessler	Regis College
<i>Chairman, Sub-Committee—Recreation</i>	
Elizabeth Gerould	Colorado Women's College
<i>Chairman, Sub-Committee—Banquet</i>	

COMMITTEE ON CONVENTION EXHIBITS

E. Vincent O'Brien	Fordham University
C. Zaner Leshner	University of Arizona
R. M. Carson	Colorado State College of Education

SCHEDULE OF COMMITTEE MEETINGS

Monday—April 21

- 12:00 M. —Executive Committee Luncheon
 1:30 P.M.—Executive Committee Meeting
 3:30 P.M.—Committee on Special Projects
 7:30 P.M.—Board of Editors of the JOURNAL
 7:30 P.M.—Committee on Office Forms and Filing Equipment

Tuesday—April 22

- 12:00 M. —Committee on Nominations
 4:30 P.M.—Committee on Regional Associations and Regional Delegates
 4:30 P.M.—Committee on Recognition

Wednesday—April 23

- 11:45 A.M.—Committee on Resolutions
 8:00 P.M.—Committee on the Budget
 8:30 P.M.—Old and New Executive Committees

Directory of Regional Associations

(Changes should be reported promptly to the Regional Associations Editor)

ALABAMA COLLEGIATE REGISTRARS ASSOCIATION

President, J. F. Glazner, Jacksonville State Teachers College, Jacksonville
Secretary-Treasurer, Eva Wilson, University of Alabama, University

ARKANSAS ASSOCIATION OF REGISTRARS

President, Laney J. Roberts, College of the Ozarks, Clarksville
Secretary-Treasurer, Matsye Gantt, Arkansas A. and M. College, Magnolia

CHICAGO CONFERENCE OF COLLEGE REGISTRARS

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Secretary-Treasurer, R. S. Harvey, Wabash College, Crawfordsville

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MISSISSIPPI ASSOCIATION OF COLLEGE REGISTRARS

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Secretary, Annie McBride, Belhaven College, Jackson

MISSOURI ASSOCIATION OF COLLEGIATE REGISTRARS

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Secretary, Martha C. Ricketts, Central College, Fayette

NEBRASKA BRANCH AMERICAN ASSOCIATION OF COLLEGIATE REGISTRARS

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NORTH CAROLINA ASSOCIATION OF COLLEGIATE REGISTRARS

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Secretary-Treasurer, Letha Brock, Greensboro College, Greensboro

NORTH CENTRAL ASSOCIATION OF COLLEGE REGISTRARS

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Secretary-Treasurer, Virginia Embree, Oklahoma College for Women, Chickasha

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Secretary, Elizabeth Tribble, Anderson College, Anderson

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Secretary, Mary C. Fugate, Averett College, Danville

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Secretary, S. L. McGraw, Concord College, Athens

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President, A. S. Lyness, Central State T.C., Stevens Point
Secretary, Miss M. B. Alexander, University of Wisconsin, Madison

Employment Service

Notices must be accompanied by a remittance in full in favor of *The American Association of Collegiate Registrars* and should be sent to the Editor in care of the *Office of the Registrar, Miami University, Oxford, Ohio.*

Notices will be inserted in the order of their receipt.

Rates: For four insertions, limited to not more than fifty words, including the address, two dollars. Additional insertions at the regular rate. Extra space will be charged at the rate of five cents a word.

In making this page available to those seeking personnel and to those seeking employment, the Association expects that at least some reply will be made to all those answering announcements. The Association assumes no obligation as to qualifications of prospective employees or responsibility of employers.

ADVANCEMENT WANTED: Man, age 24, B.A. degree in economics and A.M. degree in guidance. Now employed in University Admissions Office but interested in new position in college administration requiring more responsibility. Address JSW, care Editor. (4)

POSITION WANTED: Man, M.A. Bus. Admin. Administrative experience includes Secretary to President and Assistant to Dean Student Affairs State University and nine years as Registrar State Teachers College. Three years Education Officer Navy, two as Commanding Officer Navy V-12 Unit. Registration Supervisor Veterans' Administration since discharge from service. Address R.E.B., care Editor. (4)

ADVANCEMENT WANTED: As Registrar, Assistant Registrar, or assistant in the office of the academic Dean, by woman with sixteen years of successful experience in this work. B.A. degree. Excellent references. Address EB, care Editor. (4)

ADVANCEMENT WANTED: As registrar or Academic Dean by man, M.A., 41, married, fifteen years' school administration and teaching, also office secretarial and statistical, now registrar-business manager small college. Prefer Protestant affiliated liberal arts college north central states. Credentials from a state university available. Reply L, care Editor. (2)

ASSISTANT REGISTRAR WANTED: Man or woman interested in permanent position, college graduate, stenographic training, ability to meet public and take charge of Registrar's Office. Small liberal arts college, assistant professor status and salary, advancement possible. Southern California location. Address BCW, care Editor. (2)

POSITION WANTED: As Registrar, Assistant Registrar or Administrative Assistant, by woman with eight years of experience. M.A. degree. Prefer location in midwest or far west. Reply EW, care Editor. (2)

REGISTRAR (MALE) WANTED: Men's college, developing into university; catholic preferred; salary in proportion to training and experience. Address H, care Editor. (1)

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